

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

Form 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2022

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission File Number: 000-50744

NUVASIVE, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

33-0768598
(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 No

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

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

As of November 7, 2022, there were 52,133,961 shares of the registrant's common stock (par value \$0.001 per share) outstanding.

NuVasive, Inc.
Quarterly Report on Form 10-Q
September 30, 2022

PART I. FINANCIAL INFORMATION

Item 1.	Financial Statements	3
	Consolidated Balance Sheets	3
	Consolidated Statements of Operations	4
	Consolidated Statements of Comprehensive Income (Loss)	5
	Consolidated Statements of Equity	6
	Consolidated Statements of Cash Flows	8
	Notes to Unaudited Consolidated Financial Statements	10
Item 2.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	32
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	45
Item 4.	Controls and Procedures	46

PART II. OTHER INFORMATION

Item 1.	Legal Proceedings	48
Item 1A.	Risk Factors	48
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	48
Item 3.	Defaults Upon Senior Securities	48
Item 4.	Mine Safety Disclosures	48
Item 5.	Other Information	48
Item 6.	Exhibits	49

	SIGNATURES	50
--	----------------------------	----

PART I. FINANCIAL INFORMATION**Item 1. Financial Statements**

NUVASIVE, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except par value data)

ASSETS	September 30, 2022 (unaudited)	December 31, 2021
Current assets:		
Cash and cash equivalents	\$ 237,500	\$ 246,091
Accounts receivable, net of allowances of \$18,702 and \$21,064, respectively	235,582	214,398
Inventory, net	340,995	315,845
Prepaid income taxes	7,163	5,425
Prepaid expenses and other current assets	21,991	20,665
Total current assets	843,231	802,424
Property and equipment, net	336,808	303,664
Intangible assets, net	187,280	242,675
Goodwill	625,141	633,467
Operating lease right-of-use assets	96,352	102,987
Deferred tax assets	60,503	48,003
Restricted cash and investments	1,494	1,494
Other assets	24,136	19,361
Total assets	\$ 2,174,945	\$ 2,154,075
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 119,297	\$ 115,614
Contingent consideration liabilities	59,477	7,986
Accrued payroll and related expenses	60,889	66,596
Operating lease liabilities	10,025	9,867
Income tax liabilities	819	828
Senior convertible notes	446,898	—
Total current liabilities	697,405	200,891
Long-term senior convertible notes	443,533	884,984
Deferred tax liabilities	11,697	3,049
Operating lease liabilities	104,729	111,592
Contingent consideration liabilities	71,740	139,824
Other long-term liabilities	13,695	18,528
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 September 30, 2022 and December 31, 2021; 58,880 shares issued and 52,076 outstanding at September 30, 2022; 58,469 shares issued and 51,769 outstanding at December 31, 2021	63	63
Additional paid-in capital	1,457,828	1,434,976
Accumulated other comprehensive loss	(4,355)	(7,792)
Retained earnings	62,039	45,708
Treasury stock at cost; 6,804 shares and 6,700 shares at September 30, 2022 and December 31, 2021, respectively	(683,429)	(677,748)
Total equity	832,146	795,207
Total liabilities and equity	\$ 2,174,945	\$ 2,154,075

See accompanying Notes to unaudited Consolidated Financial Statements.

NUVASIVE, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)

(unaudited)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Net sales:				
Products	\$ 267,208	\$ 247,061	\$ 813,600	\$ 759,275
Services	28,072	23,775	82,893	77,638
Total net sales	295,280	270,836	896,493	836,913
Cost of sales (excluding below amortization of intangible assets):				
Products	59,220	69,609	181,670	181,495
Services	21,652	19,043	64,057	57,248
Total cost of sales	80,872	88,652	245,727	238,743
Gross profit	214,408	182,184	650,766	598,170
Operating expenses:				
Selling, general and administrative	154,005	146,056	474,982	449,407
Research and development	23,666	23,405	72,937	67,393
Amortization of intangible assets	12,157	14,805	37,826	43,230
Business transition costs	2,811	4,551	(1,753)	21,688
Total operating expenses	192,639	188,817	583,992	581,718
Interest and other expense, net:				
Interest income	820	23	1,125	119
Interest expense	(4,352)	(4,320)	(13,083)	(16,738)
Other expense, net	(21,053)	(13,082)	(34,490)	(24,339)
Total interest and other expense, net	(24,585)	(17,379)	(46,448)	(40,958)
(Loss) income before income taxes	(2,816)	(24,012)	20,326	(24,506)
Income tax benefit (expense)	839	2,373	(3,995)	(2,844)
Consolidated net (loss) income	\$ (1,977)	\$ (21,639)	\$ 16,331	\$ (27,350)
Net (loss) income per share:				
Basic	\$ (0.04)	\$ (0.42)	\$ 0.31	\$ (0.53)
Diluted	\$ (0.04)	\$ (0.42)	\$ 0.31	\$ (0.53)
Weighted average shares outstanding:				
Basic	52,067	51,669	51,974	51,539
Diluted	52,067	51,669	52,512	51,539

See accompanying Notes to unaudited Consolidated Financial Statements.

NUVASIVE, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(unaudited)	(in thousands)			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Consolidated net (loss) income	\$ (1,977)	\$ (21,639)	\$ 16,331	\$ (27,350)
Other comprehensive income:				
Unrealized loss on marketable securities, net of tax	—	—	—	(13)
Translation adjustments, net of tax	2,855	313	3,437	289
Other comprehensive income	2,855	313	3,437	276
Total consolidated comprehensive income (loss)	\$ 878	\$ (21,326)	\$ 19,768	\$ (27,074)

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
Issuance of common stock under employee and director equity option and purchase plans	116	—	3,716	—	—	(4)	(220)	3,496
Stock-based compensation expense	—	—	7,514	—	—	—	—	7,514
Consolidated net loss	—	—	—	—	(893)	—	—	(893)
Other comprehensive income	—	—	—	4,531	—	—	—	4,531
Balance at June 30, 2022	58,863	\$ 63	\$ 1,453,013	\$ (7,210)	\$ 64,016	(6,802)	\$ (683,313)	\$ 826,569
Issuance of common stock under employee and director equity option and purchase plans	17	—	—	—	—	(2)	(116)	(116)
Stock-based compensation expense	—	—	4,815	—	—	—	—	4,815
Consolidated net loss	—	—	—	—	(1,977)	—	—	(1,977)
Other comprehensive income	—	—	—	2,855	—	—	—	2,855
Balance at September 30, 2022	58,880	\$ 63	\$ 1,457,828	\$ (4,355)	\$ 62,039	(6,804)	\$ (683,429)	\$ 832,146

See accompanying Notes to unaudited Consolidated Financial Statements.

NUVASIVE, INC.

CONSOLIDATED STATEMENTS OF EQUITY – (Continued)

(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, 2020	57,945	\$ 62	\$ 1,550,001	\$ (7,585)	\$ 45,322	(6,569)	\$ (668,882)	\$ 918,918
Adjustment for modified retrospective adoption of accounting standard	—	—	(147,161)	—	64,472	—	—	(82,689)
Issuance of common stock under employee and director equity option and purchase plans	4	—	(6)	—	—	(1)	(55)	(61)
Stock-based compensation expense	—	—	7,709	—	—	—	—	7,709
Settlement of convertible note hedge	(1)	—	53	—	—	—	(53)	—
Equity component of convertible note settlement	1	—	574	—	—	—	—	574
Consolidated net loss	—	—	—	—	(7,510)	—	—	(7,510)
Other comprehensive loss	—	—	—	(1,554)	—	—	—	(1,554)
Balance at March 31, 2021	<u>57,949</u>	<u>\$ 62</u>	<u>\$ 1,411,170</u>	<u>\$ (9,139)</u>	<u>\$ 102,284</u>	<u>(6,570)</u>	<u>\$ (668,990)</u>	<u>\$ 835,387</u>
Issuance of common stock under employee and director equity option and purchase plans	383	—	3,809	—	—	(97)	(6,909)	(3,100)
Stock-based compensation expense	—	—	5,298	—	—	—	—	5,298
Consolidated net income	—	—	—	—	1,799	—	—	1,799
Other comprehensive income	—	—	—	1,517	—	—	—	1,517
Balance at June 30, 2021	<u>58,332</u>	<u>\$ 62</u>	<u>\$ 1,420,277</u>	<u>\$ (7,622)</u>	<u>\$ 104,083</u>	<u>(6,667)</u>	<u>\$ (675,899)</u>	<u>\$ 840,901</u>
Issuance of common stock under employee and director equity option and purchase plans	17	1	—	—	—	(5)	(345)	(344)
Stock-based compensation expense	—	—	4,965	—	—	—	—	4,965
Consolidated net loss	—	—	—	—	(21,639)	—	—	(21,639)
Other comprehensive income	—	—	—	313	—	—	—	313
Balance at September 30, 2021	<u>58,349</u>	<u>\$ 63</u>	<u>\$ 1,425,242</u>	<u>\$ (7,309)</u>	<u>\$ 82,444</u>	<u>(6,672)</u>	<u>\$ (676,244)</u>	<u>\$ 824,196</u>

See accompanying Notes to unaudited Consolidated Financial Statements.

NUVASIVE, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

(unaudited)	Nine Months Ended September 30,	
	2022	2021
Operating activities:		
Consolidated net income (loss)	\$ 16,331	\$ (27,350)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	110,200	111,818
Deferred income taxes	(5,004)	(5,211)
Amortization of non-cash interest	5,906	6,672
Stock-based compensation	19,136	17,972
Changes in fair value of contingent consideration	(8,560)	6,646
Net loss (gain) on strategic investments	1,248	(2,101)
Net loss from foreign currency adjustments	33,619	26,572
Reserves on current assets	(342)	25,418
Other non-cash adjustments	13,654	8,750
Changes in operating assets and liabilities, net of effects from acquisitions:		
Accounts receivable	(27,934)	4,142
Inventory	(26,469)	(29,266)
Prepaid expenses and other current assets	4,538	(367)
Accounts payable and accrued liabilities	(8,329)	(779)
Accrued payroll and related expenses	(3,878)	3,021
Income taxes	(1,769)	(1,167)
Net cash provided by operating activities	122,347	144,770
Investing activities:		
Acquisition of Simplify Medical, net of cash acquired	(750)	(149,463)
Payment of contingent consideration for Simplify Medical	—	(45,850)
Acquisitions and investments	(5,650)	(500)
Purchases of intangible assets	—	(1,200)
Purchases of property and equipment	(107,120)	(85,630)
Proceeds from sales of marketable securities	—	127,023
Proceeds from maturities of marketable securities	—	46,000
Other investing activities	(697)	(819)
Net cash used in investing activities	(114,217)	(110,439)
Financing activities:		
Payment of contingent consideration	(6,839)	(3)
Proceeds from the issuance of common stock	3,716	3,803
Purchases of treasury stock	(5,681)	(7,309)
Payments upon settlement of senior convertible notes	—	(649,426)
Other financing activities	(1,362)	(1,038)
Net cash used in financing activities	(10,166)	(653,973)
Effect of exchange rate changes on cash	(6,555)	(2,649)
Decrease in cash, cash equivalents and restricted cash	(8,591)	(622,291)
Cash, cash equivalents and restricted cash at beginning of period	247,585	858,363
Cash, cash equivalents and restricted cash at end of period	\$ 238,994	\$ 236,072

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:

	Nine Months Ended September 30,	
	2022	2021
Cash and cash equivalents	\$ 237,500	\$ 234,578
Restricted cash	1,494	1,494
Total cash, cash equivalents and restricted cash shown in the unaudited Consolidated Statements of Cash Flows	<u>\$ 238,994</u>	<u>\$ 236,072</u>

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 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.

The COVID-19 pandemic significantly impacted the Company's business and results of operations during the years ended December 31, 2020 and 2021, and continued to negatively impact the Company's business during the three and nine months ended September 30, 2022. Many government agencies, in conjunction with hospitals and healthcare systems have, to varying degrees, deferred, reduced, or suspended elective surgical procedures due to the COVID-19 pandemic. While certain spine surgeries are deemed essential and certain surgeries, like in cases of trauma, cannot be delayed, the Company has seen and may continue to see a significant reduction in procedural volumes as hospital systems and/or patients elect to defer spine surgery procedures.

During the three and nine months ended September 30, 2022, procedural volume rates for elective surgeries steadily recovered in the U.S. and certain international regions as government restrictions eased and hospital systems resumed more elective surgical procedures. The COVID-19 pandemic continues to evolve and its impact on the Company's business will depend on several factors that are highly uncertain and unpredictable, including, the efficacy and adoption of vaccines, future resurgences of the virus and its variants, the imposition of governmental 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, the COVID-19 pandemic and general macroeconomic conditions have led to disruptions in the global supply chain. While the Company has largely been able to mitigate the impact, it 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 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 Securities and Exchange Commission, or 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 and nine months ended September 30, 2022 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, 2021 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 October 2021, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or 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 Topic 606, Revenue from Contracts with Customers. 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 is currently evaluating the impact the standard will have on its Consolidated Financial Statements.

In June 2022, the FASB issued 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.

Revenue Recognition

In accordance with Accounting Standards Codification 606 Revenue from Contracts with Customers, or 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, economic 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:

<i>(in thousands)</i>	September 30, 2022	December 31, 2021
Allowance for credit losses at January 1	\$ 10,928	\$ 9,646
Current-period provision for expected losses	360	2,165
Write-offs charged against the allowance	(184)	(743)
Recoveries of amounts previously written off	31	42
Changes resulting from foreign currency fluctuations	(243)	(182)
Allowance for credit losses at end of period	<u>\$ 10,892</u>	<u>\$ 10,928</u>

Inventory, Net

Net inventory as of September 30, 2022 consisted of \$329.8 million of finished goods, \$6.2 million of work in progress and \$5.0 million of raw materials. Net inventory as of December 31, 2021 consisted of \$301.3 million of finished goods, \$8.1 million of work in progress and \$6.4 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.

For the three and nine months ended September 30, 2022, the Company recorded a reserve for excess and obsolete inventory of \$1.5 million and \$1.8 million, respectively, and \$15.3 million and \$23.3 million, for the three and nine months ended September 30, 2021, respectively. The decrease is primarily attributable to updates to the Company's estimates and assumptions about future product demand and product life cycles which have been affected by multiple factors, including the COVID-19 pandemic and general market conditions. During the three months ended September 30, 2021, the Company made a determination to withdraw certain products manufactured by its NuVasive Specialized Orthopedics (NSO) subsidiary from the market and discontinue sales of the products. As a result, for the three and nine months ended September 30, 2021, the Company recorded a charge of \$14.2 million.

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.

Comprehensive Income (Loss)

Comprehensive income (loss) is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources. 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 loss was \$4.4 million and \$7.8 million as of September 30, 2022 and December 31, 2021, respectively.

Product Shipment Costs

Product shipment costs, included in selling, general and administrative expense in the accompanying unaudited Consolidated Statements of Operations, were \$9.7 million and \$27.8 million for the three and nine months ended September 30, 2022, respectively, and \$7.1 million and \$22.1 million for the three and nine months ended September 30, 2021, 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, third-party merger and 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 that the contingent milestones will be achieved resulting in payment. If an accrual for contingent consideration decreases during a particular period, it results in a reduction of costs during such period.

During the three months ended September 30, 2022, the Company recorded \$2.8 million of costs related to acquisition, integration and business transition activities, which included \$0.3 million of fair value adjustments on contingent consideration liabilities associated with the Company's 2021 and 2016 acquisitions.

During the nine months ended September 30, 2022, the Company recorded a benefit of \$(1.8) million related to acquisition, integration and business transition activities, which included \$(8.6) million of fair value adjustments on contingent consideration liabilities associated with the Company's 2021, 2017 and 2016 acquisitions.

During the three months ended September 30, 2021, the Company recorded \$4.6 million of costs related to acquisition, integration and business transition activities, which included \$0.7 million of fair value adjustments on contingent consideration liabilities associated with the Company's 2021, 2017 and 2016 acquisitions.

During the nine months ended September 30, 2021, the Company recorded \$21.7 million of costs related to acquisition, integration and business transition activities, which included \$6.6 million of fair value adjustments on contingent consideration liabilities associated with the Company's 2021, 2017 and 2016 acquisitions and \$4.0 million of costs associated with the 2021 acquisition of Simplify Medical Pty Limited, or Simplify Medical.

2. Net (Loss) Income Per Share

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

<i>(in thousands, except per share data)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Numerator:				
Net (loss) income for basic	\$ (1,977)	\$ (21,639)	\$ 16,331	\$ (27,350)
Dilutive potential net (loss) income:				
Interest and debt issuance costs on the 1.00% Senior Convertible Notes due 2023, net of tax	\$ —	\$ —	\$ —	\$ —
Interest and debt issuance costs on the 0.375% Senior Convertible Notes due 2025, net of tax	—	—	—	—
Net (loss) income for diluted	\$ (1,977)	\$ (21,639)	\$ 16,331	\$ (27,350)
Denominator for basic and diluted net (loss) income per share:				
Weighted average common shares outstanding for basic	52,067	51,669	51,974	51,539
Dilutive potential common stock outstanding:				
Employee stock purchase plan (ESPP)	—	—	4	—
Restricted stock units (RSUs) and performance restricted stock units (PRSUs)	—	—	534	—
1.00% Senior Convertible Notes due 2023	—	—	—	—
0.375% Senior Convertible Notes due 2025	—	—	—	—
Weighted average common shares outstanding for diluted	52,067	51,669	52,512	51,539
Basic net (loss) income per share	\$ (0.04)	\$ (0.42)	\$ 0.31	\$ (0.53)
Diluted net (loss) income per share	\$ (0.04)	\$ (0.42)	\$ 0.31	\$ (0.53)

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 (loss) 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 September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
ESPP, RSUs and PRSUs	1,488	1,336	114	1,367
Warrants	10,169	17,127	10,169	19,716
Senior convertible notes	10,169	10,169	10,169	10,169
Total	21,826	28,632	20,452	31,252

3. 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 4, 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.

Acquisition of Simplify Medical Pty Limited

On February 24, 2021, the Company, through its indirect wholly-owned subsidiary, NuVasive (AUST/NZ) Pty Limited, acquired all of the stock interest in Simplify Medical, a developer of cervical disc technology for cervical total disc replacement procedures. Simplify Medical now operates as a wholly-owned subsidiary of the Company. The Company agreed to make an upfront payment of \$150.0 million, subject to customary purchase price adjustments, plus additional future payments contingent upon milestones related to regulatory approval and net sales from products incorporating the Simplify Medical cervical disc technology. In April 2021, the Simplify Cervical Disc received approval from the U.S. Food and Drug Administration, or FDA, for two-level cervical total disc replacement, resulting in the Company's payment of \$45.8 million for the achievement of the regulatory milestone. Additional milestone payments, which are uncapped and contingent upon net sales from products incorporating the Simplify Medical cervical disc technology, will become payable in calendar years 2023, 2024 and 2025. In connection with the closing, the Company paid \$151.0 million, which included additional amounts for customary purchase price adjustments, using available cash on hand. During the three months ended September 30, 2022, the Company made an additional payment of \$0.8 million relating to a holdback associated with the acquisition.

The allocation of the purchase price to the assets acquired and liabilities assumed based on their fair values is as follows:

(in thousands)

Cash paid for purchase	\$ 151,026
Cash	1,563
Accounts receivable	203
Inventory	6,710
Other current assets	568
Property, plant and equipment, net	381
Definite-lived intangible assets:	
Developed technology	141,700
Patents	19,000
Trade names	3,500
Goodwill	81,125
Other assets	7
Contingent consideration liabilities	(103,400)
Accounts payable, accrued expenses and other	(331)
	<u>\$ 151,026</u>

Goodwill recognized in this transaction is not deductible for tax purposes. Goodwill largely consists of expected net sales synergies resulting from the combination of product portfolios, use of the Company's existing commercial infrastructure to expand sales of Simplify Medical's products, and the assembled workforce. The intangible assets acquired are being amortized on a straight-line basis over useful lives of seventeen years, ten years, and fifteen years for developed technology-based intangible assets, patent-related intangible assets, and trade name related intangible assets, respectively. The estimated fair values of the intangible assets acquired were primarily determined using the income approach based on significant inputs that were not observable.

In connection with the acquisition, contingent consideration liabilities of \$103.4 million were recorded for the potential regulatory and net sales-based milestone payments. The fair value of the contingent liability related to the regulatory milestone payment was determined using the probability approach based on the probability of the approval being achieved as of various periods. The fair value of the contingent liability relating to the net sales-based milestone payments was determined using a Monte Carlo simulation model based on forecasted net sales, volatility factors associated with those forecasted net sales and discount rates.

The Company's results of operations for the three and nine months ended September 30, 2021 include the operating results of Simplify Medical since the date of acquisition. Acquisition costs of \$4.0 million were included in the unaudited Consolidated Statements of Operations as business transition costs for the nine months ended September 30, 2021.

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 United States, 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.

4. 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 \$(20.0) million and \$(33.6) million for the three and nine months ended September 30, 2022, respectively, and \$(13.2) million and \$(26.6) million for the three and nine months ended September 30, 2021, respectively, and are included in other expense, net in the unaudited Consolidated Statements of Operations.

To manage foreign currency exposure risks, the Company uses derivatives for activities in entities that have short-term intercompany receivables and payables denominated in a currency other than the entity's functional currency. The fair value is based on a quoted market price (Level 1). As of September 30, 2022 and December 31, 2021, a notional principal amount of \$18.5 million and \$12.2 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 \$1.3 million and \$3.7 million for the three and nine months ended September 30, 2022, respectively, and \$0.1 million and \$1.5 million for the three and nine months ended September 30, 2021, respectively, and are included in other expense, 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 de minimis as of September 30, 2022 and December 31, 2021, 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 September 30, 2022, the Company held investments in securities classified as cash equivalents and marketable equity securities. Unrealized (losses) gains for marketable equity securities was \$(1.0) million and \$(1.2) million for the three and nine months ended September 30, 2022, respectively, and included in other expense, net in the unaudited Consolidated Statement of Operations. As of December 31, 2021, the Company held investments in securities classified as cash equivalents. 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:

<i>(in thousands)</i>	Total	Quoted Price in Active Market (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
September 30, 2022:				
Cash equivalents:				
Money market funds	\$ 171,181	\$ 171,181	\$ —	\$ —
Other assets:				
Marketable equity securities	3,752	3,752	—	—
Total cash equivalents and other assets	\$ 174,933	\$ 174,933	\$ —	\$ —
December 31, 2021:				
Cash equivalents:				
Money market funds	\$ 179,451	\$ 179,451	\$ —	\$ —
Total cash equivalents	\$ 179,451	\$ 179,451	\$ —	\$ —

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 September 30, 2022 and December 31, 2021 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 September 30, 2022 and December 31, 2021 was approximately \$437.9 million and \$450.6 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 September 30, 2022 and December 31, 2021 was approximately \$388.7 million and \$433.5 million, respectively. See Note 6, 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 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 September 30, 2022:

Valuation Technique	2022
	Discounted cash flow, Monte Carlo
Discount Rate Range	7.0% - 9.0%
Weighted Average Discount Rate	7.6%
Expected Years	2023 - 2027

Contingent consideration liabilities at September 30, 2022 and December 31, 2021 were \$131.2 million and \$147.8 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):

(in thousands)	Nine Months Ended September 30,	
	2022	2021
Beginning balance at January 1	\$ 147,810	\$ 37,041
Contingent consideration liability recorded upon acquisition	—	103,400
Change in fair value measurement	(8,560)	6,646
Contingent consideration paid or settled	(8,037)	(46,006)
Changes resulting from foreign currency fluctuations	4	(29)
Balance at end of period	\$ 131,217	\$ 101,052

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 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. For the nine months ended September 30, 2022 and year ended December 31, 2021, the Company (decreased) increased the contingent consideration liability by \$(7.7) million, and \$47.9 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 \$100.8 million and \$108.5 million as of September 30, 2022 and December 31, 2021, 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 September 30, 2022 and December 31, 2021.

5. Goodwill and Intangible Assets

Goodwill and intangible assets consisted of the following:

<i>(in thousands, except years)</i>	Weighted-Average Amortization Period (in years)	Gross Amount	Accumulated Amortization	Intangible Assets, net
September 30, 2022:				
Intangible assets subject to amortization:				
Developed technology	11	\$ 360,109	\$ (232,539)	\$ 127,570
Patents	10	55,859	(35,906)	19,953
Manufacturing know-how and trade secrets	12	21,293	(21,293)	—
Trade name and trademarks	9	24,809	(21,479)	3,330
Customer relationships	9	156,039	(119,612)	36,427
Total intangible assets subject to amortization	10	<u>\$ 618,109</u>	<u>\$ (430,829)</u>	<u>\$ 187,280</u>
Intangible assets not subject to amortization:				
Goodwill				\$ 625,141
Total goodwill and intangible assets, net				<u>\$ 812,421</u>

<i>(in thousands, except years)</i>	Weighted-Average Amortization Period (in years)	Gross Amount	Accumulated Amortization	Intangible Assets, net
December 31, 2021:				
Intangible assets subject to amortization:				
Developed technology	11	\$ 374,457	\$ (209,283)	\$ 165,174
Patents	10	57,783	(31,903)	25,880
Manufacturing know-how and trade secrets	12	21,412	(21,387)	25
Trade name and trademarks	9	25,163	(19,621)	5,542
Customer relationships	9	156,208	(110,154)	46,054
Total intangible assets subject to amortization	10	<u>\$ 635,023</u>	<u>\$ (392,348)</u>	<u>\$ 242,675</u>
Intangible assets not subject to amortization:				
Goodwill				\$ 633,467
Total goodwill and intangible assets, net				<u>\$ 876,142</u>

The changes to goodwill are comprised of the following:

<i>(in thousands)</i>	
December 31, 2021	
Gross goodwill	\$ 641,767
Accumulated impairment loss	(8,300)
	<u>633,467</u>
Changes to gross goodwill	
Changes resulting from foreign currency fluctuations	(8,326)
September 30, 2022	
Gross goodwill	633,441
Accumulated impairment loss	(8,300)
	<u>\$ 625,141</u>

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 \$13.0 million and \$40.2 million for the three and nine months ended September 30, 2022, respectively, and \$15.6 million and \$45.7 million for the three and nine months ended September 30, 2021, respectively.

Total future amortization expense related to intangible assets subject to amortization at September 30, 2022 is set forth in the table below:

<i>(in thousands)</i>	
Remaining 2022	\$ 12,572
2023	26,099
2024	20,321
2025	19,489
2026	14,709
Thereafter through 2038	94,090
Total future amortization expense	\$ 187,280

6. Indebtedness

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

<i>(in thousands)</i>	September 30, 2022	December 31, 2021
1.00% Senior Convertible Notes due 2023:		
Principal amount	\$ 450,000	\$ 450,000
Unamortized debt issuance costs	(3,102)	(6,543)
	446,898	443,457
0.375% Senior Convertible Notes due 2025:		
Principal amount	450,000	450,000
Unamortized debt issuance costs	(6,467)	(8,473)
	443,533	441,527
Total Senior Convertible Notes	\$ 890,431	\$ 884,984
Less: Current portion of Senior Convertible Notes	\$ (446,898)	\$ —
Long-term Senior Convertible Notes	\$ 443,533	\$ 884,984

<i>(in thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Interest expense:				
Contractual coupon interest	\$ 1,547	\$ 1,547	\$ 4,641	\$ 7,688
Amortization of debt issuance costs	1,822	1,798	5,447	6,213
Total interest expense recognized on Senior Convertible Notes	\$ 3,369	\$ 3,345	\$ 10,088	\$ 13,901
Effective interest rates:				
Senior Convertible Notes due 2021 ⁽¹⁾	— %	2.9 %	— %	2.9 %
Senior Convertible Notes due 2023 ⁽²⁾	2.0 %	2.0 %	2.0 %	2.0 %
Senior Convertible Notes due 2025 ⁽²⁾	1.0 %	1.0 %	1.0 %	1.0 %

⁽¹⁾ Senior Convertible Notes due 2021 settled in full on March 15, 2021.

⁽²⁾ 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 and December 31, 2021, the Company had sufficient reserved shares and therefore may settle conversions of the 2023 Notes 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 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 may convert 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 September 30, 2022, the Company is unaware of any current events or market conditions that would allow holders to convert the 2023 Notes and 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. As of September 30, 2022, the Company is unaware of any current events or market conditions that would allow holders to convert the 2025 Notes.

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.

2.25% Senior Convertible Notes due 2021

In March 2016, the Company issued \$650.0 million principal amount of unsecured Senior Convertible Notes with a stated interest rate of 2.25% and a maturity date of March 15, 2021, or the 2021 Notes. Interest on the 2021 Notes began accruing upon issuance and was payable semi-annually. On March 15, 2021 the Company settled in full the 2021 Notes at their scheduled maturity as further discussed below.

The net proceeds from the offering of the 2021 Notes, after deducting initial purchasers' discounts and costs directly related to the offering, were approximately \$634.1 million. Prior to September 14, 2020, the 2021 Notes provided for settlement in cash, stock, or a combination thereof, solely at the Company's discretion. As of September 14, 2020, combination settlement was deemed to have been elected by the Company. The initial conversion rate of the 2021 Notes was 16.7158 shares per \$1,000 principal amount, which was equivalent to a conversion price of approximately \$59.82 per share, subject to adjustments. The Company also entered into transactions for a convertible notes hedge, or the 2021 Hedge, and warrants, or the 2021 Warrants, concurrently with the issuance of the 2021 Notes.

At the time of issuance and in accordance with Accounting Standards Codification Topic 470, the embedded conversion feature of the 2021 Notes required bifurcation from the notes and was accounted for as an equity instrument classified to stockholders' equity, which resulted in recognizing \$84.8 million in additional paid-in-capital during 2016. 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 2021 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 current liabilities in the 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 \$3.9 million and \$47.8 million, respectively, and a decrease in deferred tax liabilities and additional paid-in capital by \$0.9 million and \$46.1 million, respectively.

Prior to September 15, 2020, holders could have converted their 2021 Notes only under the following conditions: (a) during any calendar quarter beginning June 30, 2016, if the reported sale price of the Company's common stock for at least 20 days out of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter was greater than 130% of the conversion price on each applicable trading day; (b) during the five business day period in which the trading price of the 2021 Notes fell below 98% of the product of (i) the last reported sale price of the Company's common stock and (ii) the conversion rate on that date; and (c) upon the occurrence of specified corporate events, as defined in the 2021 Notes. From September 15, 2020 and until the close of business on the second scheduled trading day immediately preceding March 15, 2021, holders could have converted their 2021 Notes at any time (regardless of the foregoing circumstances). The Company had the ability to redeem the 2021 Notes, at its option, in whole or in part beginning on March 20, 2019 until the close of business on the business day immediately preceding September 15, 2020 if the last reported sale price of the Company's common stock had 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. No principal payments were due on the 2021 Notes prior to maturity. Other than restrictions relating to certain fundamental changes and consolidations, mergers or asset sales and customary anti-dilution adjustments, the 2021 Notes did not contain any financial covenants and did not restrict the Company from paying dividends or issuing or repurchasing any of its other securities.

2021 Hedge

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

2021 Warrants

The Company sold warrants to the 2021 Counterparties to acquire up to 10,865,270 shares of the Company's common stock. The 2021 Warrants expired on various dates from June 2021 through December 2021 and could have only been settled in cash or net shares. As of December 31, 2021, all of the warrants expired unexercised. The Company received \$44.9 million in cash proceeds from the sale of the 2021 Warrants, which was recorded in additional paid-in-capital. Prior to their expiration and termination, the 2021 Warrants could have had 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 exceeded the strike price of the 2021 Warrants, which was \$80.00 per share. The Company used the treasury share method for assumed conversion of the 2021 Warrants to compute the weighted average common shares outstanding for diluted earnings per share.

Settlement of the 2021 Notes and 2021 Hedge

On March 15, 2021, the 2021 Notes reached maturity and the Company settled in full the 2021 Notes. The Company received conversion notices from the holders of 1.4% of the 2021 Notes, representing \$9.1 million outstanding principal amount thereof, or the Conversions. The Company paid an aggregate of \$649.4 million in cash for the settlement of the 2021 Notes, which included \$640.9 million in satisfaction of the outstanding principal of the 2021 Notes and \$8.5 million in cash in connection with the settlement of the Conversions. Additionally, in satisfaction of the Conversions, and pursuant to combination settlement, the Company issued 837 shares of common stock in the aggregate to the holders who elected to convert their outstanding notes. The Company funded the repayment of the outstanding principal amount of the 2021 Notes, accrued interest thereon, and the cash component of the Conversions using available cash on hand.

In connection with the settlement of the 2021 Notes, the Company exercised its rights under the convertible note hedge transactions with the 2021 Counterparties on March 15, 2021 and received 842 shares of its own common stock.

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 further 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 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 September 30, 2022 and December 31, 2021.

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.

7. Stockholders' Equity

In October 2017, the Company announced that the Board of Directors approved a share repurchase program authorizing the repurchase of up to \$100 million of the Company's common stock over a three-year period. In February 2020, the Company announced that the Board of Directors approved an increase in the share repurchase authorization from \$100 million to \$150 million of the Company's common stock and extended the authorization through December 31, 2021. In March 2020, in connection with the issuance of the 2025 Notes, the Company repurchased approximately 1,085,000 shares of its common stock for \$75 million. On November 3, 2021, the Board of Directors approved an increase in the share repurchase authorization by \$25 million and extended the authorization through December 31, 2022. Accordingly, as of September 30, 2022, the Company is authorized to repurchase up to \$100 million of common stock under the share repurchase program. 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 shares of common stock under the repurchase program during the nine months ended September 30, 2022.

On November 2, 2022, the Board of Directors approved a one-year extension of the Company's share repurchase program. Accordingly, as of November 2, 2022, the Company is authorized to purchase up to \$100 million of its common stock through December 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:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Selling, general and administrative expense	\$ 4,110	\$ 3,245	\$ 15,722	\$ 13,438
Research and development expense	644	1,656	3,261	4,323
Cost of sales	61	64	153	211
Stock-based compensation expense before taxes	4,815	4,965	19,136	17,972
Related income tax benefit	(1,112)	(759)	(4,420)	(2,746)
Stock-based compensation expense, net of taxes	\$ 3,703	\$ 4,206	\$ 14,716	\$ 15,226

As of September 30, 2022, there was \$48.7 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 2.2 years.

Restricted Stock Units and Performance-Based Restricted Stock Units

The Company issued approximately 17,000 and 327,000 shares of common stock, before net share settlement, upon vesting of RSUs and PRSUs during the three and nine months ended September 30, 2022, respectively, and issued approximately 371,000 shares of common stock, before net share settlement, upon vesting of RSUs and PRSUs during the year ended December 31, 2021.

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:

ESPP	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Volatility	49 %	35 %	39 %	42 %
Expected term (years)	0.5	0.5	0.5	0.5
Risk free interest rate	1.5 %	0.1 %	0.8 %	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 nine months ended September 30, 2022, 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: return to provision adjustments, the impact of jurisdictions where the Company receives no tax benefit, state tax credit benefits, tax expense related to shortfalls on stock-based compensation, and changes in tax rates. The Company's effective tax rate recorded for the nine months ended September 30, 2022 is 20%.

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 nine months ended September 30, 2022, there was an increase in gross unrecognized tax benefits of approximately \$2.1 million primarily related to research and development credits, offset by a decrease of \$0.4 million primarily related to statute of limitations expirations. 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 and Illinois State for the 2019 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 2017 and 2014 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:

<i>(in thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Spinal hardware	\$ 225,931	\$ 204,250	\$ 679,406	\$ 630,052
Surgical support	69,349	66,586	217,087	206,861
Total net sales	\$ 295,280	\$ 270,836	\$ 896,493	\$ 836,913

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

<i>(in thousands)</i>	Net Sales				Property and Equipment, Net	
	Three Months Ended September 30,		Nine Months Ended September 30,		September 30, 2022	December 31, 2021
	2022	2021	2022	2021		
United States	\$ 228,277	\$ 207,228	\$ 687,444	\$ 644,848	\$ 286,364	\$ 256,688
International (excludes Puerto Rico)	67,003	63,608	209,049	192,065	50,444	46,976
Total	\$ 295,280	\$ 270,836	\$ 896,493	\$ 836,913	\$ 336,808	\$ 303,664

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 September 30, 2022 and December 31, 2021.

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 September 30, 2022 and December 31, 2021:

(in thousands, except years and rates)

	September 30, 2022	December 31, 2021
Assets		
Operating	\$ 96,352	\$ 102,987
Financing	2,006	2,276
Total leased assets	<u>\$ 98,358</u>	<u>\$ 105,263</u>
Liabilities		
Current:		
Operating	\$ 10,025	\$ 9,867
Financing	1,377	1,546
Long-term:		
Operating	104,729	111,592
Financing	822	885
Total lease liabilities	<u>\$ 116,953</u>	<u>\$ 123,890</u>
Supplemental non-cash information:		
Weighted-average remaining lease term (years) - operating leases	11.1	11.6
Weighted-average remaining lease term (years) - finance leases	2.6	2.1
Weighted-average discount rate - operating leases	5.3 %	5.3 %
Weighted-average discount rate - finance leases	3.6 %	4.7 %

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:

<i>(in thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Lease expense:				
Operating lease expense	\$ 4,016	\$ 4,068	\$ 12,171	\$ 12,004
Finance lease expense:				
Depreciation of right-of-use assets	458	352	1,292	1,006
Interest expense on lease liabilities	16	27	70	88
Total lease expense	<u>\$ 4,490</u>	<u>\$ 4,447</u>	<u>\$ 13,533</u>	<u>\$ 13,098</u>
Consolidated Statements of Cash Flows information:				
Operating cash flows used for operating leases	\$ 4,090	\$ 3,914	\$ 12,382	\$ 11,403
Operating cash flows used for financing leases	16	27	70	88
Financing cash flows used for financing leases	380	367	1,362	1,038
Total cash paid for amounts included in the measurement of lease liabilities	<u>\$ 4,486</u>	<u>\$ 4,308</u>	<u>\$ 13,814</u>	<u>\$ 12,529</u>
Supplemental non-cash information:				
Operating lease liabilities arising from obtaining right-of-use assets	\$ 838	\$ 1,375	\$ 2,245	\$ 10,534

The Company's future minimum annual lease payments under operating and financing leases at September 30, 2022 are as follows:

<i>(in thousands)</i>	Financing Leases	Operating Leases
Remaining 2022	\$ 561	\$ 4,111
2023	1,033	15,369
2024	493	14,122
2025	144	12,615
2026	44	12,363
Thereafter	3	96,509
Total minimum lease payments	<u>\$ 2,278</u>	<u>\$ 155,089</u>
Less: amount representing interest	(79)	(40,335)
Present value of obligations under leases	2,199	114,754
Less: current portion	(1,377)	(10,025)
Long-term lease obligations	<u>\$ 822</u>	<u>\$ 104,729</u>

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 September 30, 2022, future commitments for such key executives were approximately \$15.5 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 value proposition of our products, services, 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 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, 2021 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, 2021 contained in our 2021 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, or IONM. 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 system, 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—atomic, physiologic motion, and radiologic design;
- our neuromonitoring systems, which use proprietary software-driven nerve detection and avoidance technology, and our 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 develop and expand its application offerings, including investments related to 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 participation along the spine care continuum. 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 for surgical automation.

The COVID-19 pandemic significantly impacted our business and results of operations during the years ended December 31, 2020 and 2021, and continued to negatively impact our business during the three and nine months ended September 30, 2022. Many government agencies, in conjunction with hospitals and healthcare systems have, to varying degrees, deferred, reduced, or suspended elective surgical procedures due to the COVID-19 pandemic. While certain spine surgeries are deemed essential and certain surgeries, like in cases of trauma, cannot be delayed, we have seen and may continue to see a significant reduction in procedural volumes as hospital systems and/or patients elect to defer spine surgery procedures.

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 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.

Despite the impact COVID-19 and global macroeconomic factors have had on our business, we continue to invest in research and development, invest in our people, improve operating processes, and take steps to position ourselves for long-term success. During the three and nine months ended September 30, 2022, procedural volume rates for elective surgeries steadily recovered in the U.S. and certain international regions as government restrictions eased and hospital systems resumed more elective surgical procedures. The COVID-19 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, future resurgences of the virus and its variants, the imposition of governmental 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 is provided under Item 1A – Risk Factors of Part I of our Annual Report on Form 10-K for the year ended December 31, 2021.

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 will likely increase over time as a result of our commercialization of the Pulse platform.

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.

During the three months ended September 30, 2021, we made a determination to withdraw certain Precice biodur products manufactured by our NuVasive Specialized Orthopedics (NSO) subsidiary from the market and discontinue sales of the products. As a result, we recorded a charge of \$14.2 million in the quarter for an increase to our inventory reserves and related liabilities. The withdrawn products did not include the Precice titanium device system or MAGEC system, and did not make up a material portion of our net sales.

Results of Operations

Net Sales

(in thousands, except %)	September 30,			
	2022	2021	\$ Change	% Change
Three Months Ended				
Net sales				
Spinal hardware	\$ 225,931	\$ 204,250	\$ 21,681	11 %
Surgical support	69,349	66,586	2,763	4 %
Total net sales	\$ 295,280	\$ 270,836	\$ 24,444	9 %
Nine Months Ended				
Net sales				
Spinal hardware	\$ 679,406	\$ 630,052	\$ 49,354	8 %
Surgical support	217,087	206,861	10,226	5 %
Total net sales	\$ 896,493	\$ 836,913	\$ 59,580	7 %

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 has had, and may continue to have, an adverse effect on our business. While procedural volume rates for elective surgeries did recover in the U.S. and certain international regions during the three and nine months ended September 30, 2022, the COVID-19 pandemic continues to evolve and it is not possible to accurately predict the length or severity of the COVID-19 pandemic or the timing for a broad and sustained resumption of elective surgical procedures.

Net sales from our spinal hardware product line offerings increased \$21.7 million and \$49.4 million, or 11% and 8%, during the three and nine months ended September 30, 2022, respectively, compared to the same periods in 2021. Product volume within spinal hardware increased our net sales by approximately 17% and 12% during the three and nine months ended September 30, 2022, respectively, compared to the same periods in 2021, primarily due to net sales growth from the commercial launch of the Simplify Cervical Disc during the first quarter of 2021, as well as increased procedural volumes as elective surgeries continued to recover throughout the three and nine months ended September 30, 2022. There were unfavorable pricing changes of approximately 1% during both the three and nine months ended September 30, 2022, compared to the same periods in 2021. Foreign currency fluctuations decreased our spinal hardware net sales by approximately 5% and 3% during the three and nine months ended September 30, 2022, respectively, compared to the same periods in 2021.

Net sales from our surgical support product line offerings increased \$2.8 million and \$10.2 million, or 4% and 5%, during the three and nine months ended September 30, 2022, respectively, compared to the same periods in 2021. Product and service volume within surgical support increased our net sales by approximately 6% and 7% during the three and nine months ended September 30, 2022, respectively, compared to the same periods in 2021, primarily due to net sales growth from the commercial launch of the Pulse platform during the third quarter of 2021, as well as increased IONM service and surgical procedural volumes as elective surgeries continued to recover throughout the three and nine months ended September 30, 2022. There were unfavorable pricing changes of approximately 1% during both the three and nine months ended September 30, 2022, compared to the same periods in 2021. Foreign currency fluctuations decreased our surgical support net sales by approximately 1% during both the three and nine months ended September 30, 2022, compared to the same periods in 2021.

Cost of Sales, Excluding Below Amortization of Intangible Assets

(in thousands, except %)	September 30,		\$ Change	% Change
	2022	2021		
Three Months Ended				
Cost of sales	\$ 80,872	\$ 88,652	\$ (7,780)	(9)%
% of total net sales	27 %	33 %		(6)%
Nine Months Ended				
Cost of sales	\$ 245,727	\$ 238,743	\$ 6,984	3 %
% of total net sales	27 %	29 %		(2)%

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 United States, and accordingly, foreign currency fluctuations have not materially impacted our cost of sales.

Cost of sales decreased \$7.8 million, or 9%, during the three months ended September 30, 2022, compared to the same period in 2021. Cost of sales as a percentage of net sales for the three months ended September 30, 2022 decreased by 6%, compared to the same period in 2021. The decrease was due primarily to \$14.2 million in costs recorded in the three months ended September 30, 2021 related to inventory reserves associated with a withdrawal of certain products from the market that did not recur, offset by increases associated with higher net sales in the three months ended September 30, 2022.

Cost of sales increased \$7.0 million, or 3%, during the nine months ended September 30, 2022, compared to the same period in 2021. Cost of sales as a percentage of net sales for the nine months ended September 30, 2022 decreased by 2%, compared to the same period in 2021. The increase in cost of sales for the nine months ended September 30, 2022 is primarily associated with higher net sales, compared to the same period in 2021. Offsetting this increase is a decrease in the amount of our excess and obsolete inventory reserves of \$21.5 million as compared to the nine months ended September 30, 2021. The reduction in our excess and obsolete inventory reserves is attributable to the \$14.2 million inventory reserve recorded in the third quarter of 2021 associated with the withdrawal of certain products from the market that did not recur. Additionally, our excess and obsolete inventory reserves decreased by \$7.3 million, during the nine months ended September 30, 2022 as compared to the same period in 2021, due to updates to our estimates and assumptions about future demand for certain spinal hardware products with market conditions affected by the COVID-19 pandemic.

Operating Expenses

(in thousands, except %)	Three Months Ended September 30,		\$ Change	% Change
	2022	2021		
Selling, general and administrative	\$ 154,005	\$ 146,056	\$ 7,949	5 %
% of total net sales	52 %	54 %		
Research and development	23,666	23,405	261	1 %
% of total net sales	8 %	9 %		
Amortization of intangible assets	12,157	14,805	(2,648)	(18 %)
Business transition costs	2,811	4,551	(1,740)	(38 %)
Nine Months Ended September 30,				
(in thousands, except %)	2022	2021	\$ Change	% Change
Selling, general and administrative	\$ 474,982	\$ 449,407	\$ 25,575	6 %
% of total net sales	53 %	54 %		
Research and development	72,937	67,393	5,544	8 %
% of total net sales	8 %	8 %		
Amortization of intangible assets	37,826	43,230	(5,404)	(13 %)
Business transition costs	(1,753)	21,688	(23,441)	(108 %)

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 \$7.9 million and \$25.6 million, or 5% and 6%, during the three and nine months ended September 30, 2022, respectively, compared to the same periods in 2021. The increase during the three and nine months ended September 30, 2022, compared to the same periods in 2021, is primarily due to increased commissions and freight costs associated with higher net sales, increased travel expenses coinciding with the easing of COVID-19 related restrictions, increased legal expenses associated with certain ongoing litigation matters and increased depreciation costs for surgical sets supporting higher net sales. During the three and nine months ended September 30, 2022, we have experienced macroeconomic inflationary pressures within our selling, general and administrative expenses, including travel expenses and freight costs.

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 \$0.3 million and \$5.5 million, or 1% and 8%, during the three and nine months ended September 30, 2022, respectively, compared to the same periods in 2021. The increase in spending for both periods is primarily due to higher headcount-related costs and further development, enhancement and functionality of our current and future product offerings, including capital equipment and the Simplify Cervical Disc acquired during the first quarter of 2021. Over the course of the ongoing 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.

Business Transition Costs

We incur certain costs related to acquisition, integration and business transition activities, which include severance, relocation, consulting, leasehold exit costs, third-party merger and acquisition costs, contingent consideration fair value adjustments and other costs directly associated with such activities. Contingent consideration is accrued based on the fair value of the expected payment, and such accruals are subject to increase or decrease based on 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.

During the three months ended September 30, 2022, we recorded \$2.8 million of costs related to acquisition, integration and business transition activities, which included \$0.3 million of fair value adjustments on contingent consideration liabilities associated with our 2021 and 2016 acquisitions.

During the nine months ended September 30, 2022, we recorded a benefit of \$(1.8) million related to acquisition, integration and business transition activities, which included \$(8.6) million of fair value adjustments on contingent consideration liabilities associated with our 2021, 2017 and 2016 acquisitions.

During the three months ended September 30, 2021, we recorded \$4.6 million of costs related to acquisition, integration and business transition activities, which included \$0.7 million of fair value adjustments on contingent consideration liabilities associated with our 2021, 2017 and 2016 acquisitions.

During the nine months ended September 30, 2021, we recorded \$21.7 million of costs related to acquisition, integration and business transition activities, which included \$6.6 million of fair value adjustments on contingent consideration liabilities associated with our 2021, 2017 and 2016 acquisitions and \$4.0 million of costs associated with the 2021 acquisition of Simplify Medical.

Interest and Other Expense, Net

(in thousands, except %)	September 30,		\$ Change	% Change
	2022	2021		
Three Months Ended				
Interest income	\$ 820	\$ 23	\$ 797	3,465 %
Interest expense	(4,352)	(4,320)	(32)	1 %
Other expense, net	(21,053)	(13,082)	(7,971)	61 %
Total interest and other expense, net	\$ (24,585)	\$ (17,379)	\$ (7,206)	41 %
Nine Months Ended				
Interest income	\$ 1,125	\$ 119	\$ 1,006	845 %
Interest expense	(13,083)	(16,738)	3,655	(22)%
Other expense, net	(34,490)	(24,339)	(10,151)	42 %
Total interest and other expense, net	\$ (46,448)	\$ (40,958)	\$ (5,490)	13 %

Total interest and other expense, 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, net increased by \$7.2 million during the three months ended September 30, 2022 as compared to the same period in 2021. Other expense, net increased by \$8.0 million during the three months ended September 30, 2022, as compared to the same period in 2021, due primarily to net foreign currency exchange losses of \$20.0 million during the three months ended September 30, 2022, as compared to \$13.2 million of net foreign currency exchange losses in the same period in 2021. We established intercompany receivables and payables and contingent consideration liabilities in connection with the acquisition of Simplify Medical, which are subject to foreign currency remeasurement.

Total interest and other expense, net increased by \$5.5 million during the nine months ended September 30, 2022 as compared to the same period in 2021. Interest expense decreased by \$3.7 million as compared to the same period in 2021 primarily due to the Senior Convertible Notes due 2021 which were settled at maturity in March 2021. Other expense, net increased by \$10.2 million during the nine months ended September 30, 2022, as compared to the same period in 2021, due primarily to an increase in net foreign exchange losses and the change in unrealized gains and losses from strategic investments. Net foreign currency exchange losses were \$33.6 million and \$26.6 million for the nine months ended September 30, 2022 and 2021, respectively.

Income Tax Benefit (Expense)

(in thousands, except %)	September 30,	
	2022	2021
Three Months Ended		
Income tax benefit	\$ 839	\$ 2,373
Effective income tax rate	30 %	10 %
Nine Months Ended		
Income tax expense	\$ (3,995)	\$ (2,844)
Effective income tax rate	20 %	(12)%

The provision for income tax expense was an income tax benefit of 30% on pre-tax losses for the three months ended September 30, 2022, compared with an income tax benefit of 10% on pre-tax losses for the three months ended September 30, 2021. The rate change during the three months ended September 30, 2022, was primarily due to reduced losses in jurisdictions without tax benefit and favorable return to provision adjustments, offset by increased valuation allowances and reduced foreign derived intangible income tax benefit.

The provision for income tax expense was 20% on pre-tax income for the nine months ended September 30, 2022, compared with an income tax expense of 12% on pre-tax losses for the nine months ended September 30, 2021. The rate change during the nine months ended September 30, 2021, was primarily due to reduced losses in jurisdictions with no tax benefit, reduced limitations on officer's compensation deductions, and favorable return to provision adjustments. These increases were offset by increased valuation allowances, and tax expense related to shortfalls on stock-based compensation.

Liquidity, Cash Flows and Capital Resources

Liquidity and Capital Resources

Our principal sources of liquidity are our existing cash, cash equivalents and marketable securities, cash generated from operations, proceeds from our convertible notes issuances, and access to our revolving line of credit. We expect that cash provided by operating activities may fluctuate in future periods as a result of a number of factors, including fluctuations in our operating results, which include impacts from the COVID-19 pandemic, 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. 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 pound sterling, the euro, the Australian dollar, the Brazilian real, the Colombian peso, the Singapore dollar, and the yen, could 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 September 30, 2022, the cash balance held by our foreign subsidiaries with currencies other than the U.S. dollar was approximately \$47.8 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 September 30, 2022, our account receivable balance held by our foreign subsidiaries with currencies other than the U.S. dollar was approximately \$65.8 million. We have operations in markets in which there is governmental financial instability which could impact funds that flow into the medical reimbursement system. In addition, loss of financial stability within these markets could lead to delays in reimbursement or inability to remit payment due to currency controls. Specifically, we have operations and/or sales in Puerto Rico, Brazil and Argentina. We do not have any material financial exposure to one customer or one country that would significantly hinder our liquidity.

We are 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 September 30, 2022, we anticipate the remaining sales-based milestones will become payable at varying times by 2024.

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 September 30, 2022, we anticipate the remaining milestones will become payable at varying times between 2023 and 2027, but 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 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. During the third quarter of 2022, we made a payment of \$0.8 million relating to a holdback associated with the acquisition. Milestone payments, which are contingent upon net sales from products incorporating the Simplify Medical cervical disc technology, will become payable in calendar years 2023, 2024 and 2025, with the first payment anticipated to be made during the first quarter of 2023.

Cash, cash equivalents and short-term investments were \$237.5 million and \$246.1 million at September 30, 2022 and December 31, 2021, 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, cash equivalents, short-term investments, 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 is provided under Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2021.

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 September 30, 2022, there has been no legislation passed to repeal or modify the provision. This provision has adversely impacted cash flows from operations during the nine months ended September 30, 2022 and is expected to continue to adversely impact cash flows from operations for the remainder of 2022 unless the provision is repealed or modified.

The decrease in liquidity during the nine months ended September 30, 2022 of \$8.6 million was primarily driven by timing associated with our operating cash flows, \$107.1 million in cash outflows for purchases of property and equipment, as well as a \$7.5 million payment for the successful achievement of the commercial milestone related to the September 2017 acquisition. At September 30, 2022, 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:

<i>(in thousands, except %)</i>	Nine Months Ended September 30,		2021 to 2022	
	2022	2021	\$ Change	% Change
Net cash provided by operating activities	\$ 122,347	\$ 144,770	\$ (22,423)	(15)%
Net cash used in investing activities	(114,217)	(110,439)	(3,778)	3 %
Net cash used in financing activities	(10,166)	(653,973)	643,807	(98)%
Effect of exchange rate changes on cash	(6,555)	(2,649)	(3,906)	147 %
Decrease in cash, cash equivalents and restricted cash	\$ (8,591)	\$ (622,291)	\$ 613,700	(99)%

Cash Flows from Operating Activities

Cash provided by operating activities was \$122.3 million for the nine months ended September 30, 2022, compared to \$144.8 million for the same period in 2021. The \$22.4 million decrease in cash provided by operating activities was primarily due to the timing of collections and payments associated with our accounts receivable, accounts payable and accrued liabilities, and an increase in payments for compensation related accruals, which was partially offset by timing of spending for inventory purchases during the nine months ended September 30, 2022, compared to the same period in 2021.

Cash Flows from Investing Activities

Cash used in investing activities was \$114.2 million for the nine months ended September 30, 2022, compared to \$110.4 million for the same period in 2021, or a \$3.8 million increase. During the nine months ended September 30, 2021, cash used in investing activities increased by \$22.3 million, as a result of payments of \$195.3 million in connection with the acquisition of Simplify Medical and the associated regulatory milestone being met, offset by proceeds of \$173.0 million from sales and maturities of marketable securities. This net decrease was partially offset by increases in cash used in investing activities of \$26.6 million from increases for purchases of property and equipment and strategic investments of \$21.5 million and \$5.2 million, respectively, in the nine months ended September 30, 2022.

Cash Flows from Financing Activities

Cash used in financing activities was \$10.2 million for the nine months ended September 30, 2022, compared to \$654.0 million for the same period in 2021. The \$643.8 million decrease in cash used in financing activities was primarily due to the \$649.4 million payment to settle our Senior Convertible Notes due 2021 during the nine months ended September 30, 2021. This decrease was partially offset by a \$7.5 million payment relating to contingent consideration, of which \$6.8 million is reflected within our financing activities, and the remainder allocated to our operating activities during the nine months ended September 30, 2022.

Treasury stock purchases related to equity award vesting totaled \$5.7 million during the nine months ended September 30, 2022. 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. We may settle conversions of the 2023 Notes 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. 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. As of September 30, 2022, we are unaware of any current events or market conditions that would allow holders to convert the 2023 Notes. 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. 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. As of September 30, 2022, we are unaware of any current events or market conditions that would allow holders to convert the 2025 Notes.

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 further 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 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 December 31, 2021 and September 30, 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 September 30, 2022, we are in compliance with the 2020 Credit Agreement covenants.

See Note 6, 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 United States. 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, 2021 and there have been no material changes during the nine months ended September 30, 2022.

Off-Balance Sheet Arrangements

As of September 30, 2022, we did not have any off-balance sheet arrangements.

Contractual Obligations and Commitments

As of September 30, 2022, 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, 2021.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Sensitivity and Risk

Our exposure to interest rate risk at September 30, 2022 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 September 30, 2022, we do not hold any material asset-backed investment securities and as of September 30, 2022, we did not realize any losses related to asset-backed investment securities. Based upon our overall interest rate exposure as of September 30, 2022, 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 September 30, 2022, 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 and interest income related to marketable securities were immaterial during all periods presented.

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 6, 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 United States, and the majority of our sales since inception have been made in the United States dollars. However, as our business in markets outside of the United States 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 United States 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 United States 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 United States dollar into the United States 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 \$18.5 million as of the nine months ended September 30, 2022. During the nine months ended September 30, 2022, a gain of \$3.7 million was recognized in other expense, 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 September 30, 2022. 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 September 30, 2022. Based on such evaluation, our management has concluded that as of September 30, 2022, the Company's disclosure controls and procedures are effective.

Changes in Internal Control Over Financial Reporting

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

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

As a result of the COVID-19 pandemic, certain employees began working remotely and we expect our employees may continue to work remotely or in a hybrid work structure for the foreseeable future. We have not identified any material changes in our internal control over financial reporting as a result of these changes to the working environment. We are continually monitoring and assessing the COVID-19 situation to determine any potential impacts on the design and operating effectiveness of our internal controls over financial reporting.

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, 2021. An investment in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described under Item 1A of Part I of our Annual Report on Form 10-K, together with all other information contained or incorporated by reference in this report before you decide to invest in our common stock. If any of the Risk Factors were to actually occur, our business, financial condition, results of operations and our future growth prospects could be materially and adversely affected. Under the circumstances, the trading price of our common stock could decline, and you may lose all or part of your investment.

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

None.

Item 3. *Defaults Upon Senior Securities*

None.

Item 4. *Mine Safety Disclosures*

None.

Item 5. *Other Information*

None.

Item 6. Exhibits

Exhibit Number	Description
3.1	Restated Certificate of Incorporation (incorporated by reference to our Quarterly Report on Form 10-Q filed with the SEC on August 13, 2004)
3.2	Certificate of Amendment to the Restated Certificate of Incorporation (incorporated by reference to our Current Report on Form 8-K filed with the SEC on September 28, 2011)
3.3	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)
101.#	Amendment No. 2 to 2004 Amended and Restated Employee Stock Purchase Plan of NuVasive, Inc.
102.#	Employment Letter dated August 22, 2022 between the Company and Michael Farrington
31.1*	Certification of the Chief Executive Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. section 1350
31.2*	Certification of the Chief Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. section 1350
32.1*	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	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)
#	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 for purposes of Section 18 of the Securities Exchange Act of 1934 and are not to be incorporated by reference into any filing of NuVasive, Inc., whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURES

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

NUVASIVE, INC.

Date: November 9, 2022

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

Date: November 9, 2022

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

**AMENDMENT NO. 2
TO
AMENDED AND RESTATED 2004 EMPLOYEE STOCK PURCHASE PLAN
OF NUVASIVE, INC.**

WHEREAS, effective as of August 9, 2022 the Board of Directors of NuVasive, Inc. agreed to amend the Amended and Restated 2004 Employee Stock Purchase Plan, as amended from time to time (the “**AR 2004 ESPP**”), pursuant to Section 26 of the AR 2004 ESPP.

NOW, THEREFORE, the AR 2004 ESPP shall be amended as of August 9, 2022 as follows:

1. The last sentence of Section 22 of the AR 2004 ESPP is amended in its entirety to read as follows:

“This Plan shall continue until the earlier to occur of (a) termination of this Plan by the Board or the Committee (which termination may be effected by the Board or the Committee at any time), (b) issuance of all the shares of Common Stock reserved for issuance under this Plan, or (c) December 31, 2026.”

2. Except as amended by this Amendment No. 2, the AR 2004 ESP shall remain unchanged and in full force and effect.
3. Except as otherwise provided in this Amendment No. 2, terms used herein shall have the meanings ascribed to such terms in the AR 2004 ESPP.

August 22, 2022

Michael Farrington

Dear Mike,

Congratulations on your new full-time, exempt role of **Senior Vice President, People and Culture**, with NuVasive, Inc. at our San Diego, California site. Our Company's continued success is dependent on employees like you embodying our core values and working diligently to drive our priorities. In this new role, you will report to me, and we would like for you to begin your role in this capacity on **September 5, 2022**.

I am pleased to present you with changes to your compensation package as detailed below.

JOB TITLE, CAREER BAND & COMPENSATION

Job Title: **Senior Vice President, People and Culture**

Career Band: **P12**

Target Direct Compensation Package:

	Current	New	Change
Annual Salary Rate (Next Salary Review Q1 2023)	\$325,000	\$350,000	+7.7%
Annual Bonus Target %* (Anticipated to be effective September 5, 2022)	\$195,000 (60%)	\$210,000 (60%)	+7.7%
Annual LTI Target	\$400,000	\$500,000	+25%
Annual Target Total Direct Compensation:	\$920,000	\$1,060,000	+15.2%

** Above table is for illustrative purposes only. You will continue to be eligible for the discretionary annual corporate bonus plan which depends upon the Company's successful achievement of its operational goals and your overall performance against your goals. This bonus requires that you be employed in good standing on the payout date (which is generally the first week of March, in the following year). Bonus target percentage changes after April 1 of the plan year are adjusted to account for changes during the plan year. Your Bonus Target amount shall equal the sum of your Eligible Earnings for the period of time in role multiplied by the respective Target Bonus Percentage for each bonus-eligible role you occupied during the plan year.*

As outlined in the table above, we expect to provide you with a 2023 annual LTI award that has a grant face value of USD **\$500,000**, which is expected to be made in March 2023. This award is expected to be comprised of restricted stock units and performance stock units, consistent with the annual LTI awards for other Company executives, and subject to cliff vesting on the third anniversary of the date of grant. The value and form of award is subject to approval by NuVasive's Board of Directors or its delegate and will be governed by the terms of the applicable grant agreements(s).

In your new role, you will continue to be eligible for NuVasive's executive benefits package, which currently includes an annual executive physical, executive financial planning and eligibility to participate in a deferred compensation plan. Further, you will be eligible for benefits under the NuVasive Executive Severance Plan, in accordance with the terms thereof. Also, subject to approval by NuVasive's Board of Directors or its delegate, you will be eligible to receive an individual Change-in-Control Agreement with a cash severance multiplier of 1.5x, and which still requires a "double-trigger" of events before any respective severance benefits are payable.

Your employment with NuVasive remains "at-will." This means your employment is not for any specified period of time and can be terminated by you or NuVasive at any time for any reason, with or without cause or advance notice. As a Company employee, you will be required to comply with all Company policies and procedures. You will also be subject to NuVasive's stock ownership guidelines, which require that you acquire and maintain ownership of NuVasive stock with a value equal to one times (1x) your base salary within five years, subject to and in accordance with the terms of the guidelines.

I look forward to your continued dedication to driving our purpose and priorities as we continue to build the future of NuVasive together. If you have any questions regarding your compensation, please don't hesitate to reach out to me or your HR representative.

Sincerely,

/s/ J. Christopher Barry

Chris Barry

Chief Executive Officer

I have read this offer letter in its entirety and agree with the terms and conditions of employment. I understand and agree that my employment with NuVasive is at-will.

8/23/22

Dated

/s/ Michael Farrington

Michael Farrington

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: November 9, 2022

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

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: November 9, 2022

By: /s/ Matthew K. Harbaugh

Matthew K. Harbaugh

Executive Vice President and Chief Financial Officer

**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 September 30, 2022, 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: November 9, 2022

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: November 9, 2022

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