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 March 31, 2024
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 000-26224

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

Delaware	**51-0317849**
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	**(I.R.S. EMPLOYER IDENTIFICATION NO.)**
1100 Campus Road **Princeton , New Jersey**	**08540**
(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES)	**(ZIP CODE)**

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

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

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

TITLE OF EACH CLASS	TRADING SYMBOL	NAME OF EACH EXCHANGE ON WHICH REGISTERED
Common Stock, Par Value $.01 Per Share	IART	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 that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

The number of shares of the registrant's Common Stock, $0.01 par value, outstanding as of May 3, 2024 was 78,799,694.

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
INDEX

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

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

	Three Months Ended March 31,	
	2024	**2023**
Total revenue, net	$ 368,872	$ 380,846
Costs and expenses:		
Cost of goods sold	162,038	147,975
Research and development	26,965	26,724
Selling, general and administrative	165,798	166,657
Intangible asset amortization	10,107	3,108
Total costs and expenses	364,908	344,464
Operating income	3,964	36,382
Interest income	5,040	4,107
Interest expense	(13,624)	(12,100)
Other (expense) income, net	(610)	1,389
(Loss) income before income taxes	(5,230)	29,778
(Benefit) provision for income taxes	(1,949)	5,552
Net (loss) income	$ (3,281)	$ 24,226
Net (loss) income per share		
Basic	$ (0.04)	$ 0.30
Diluted	$ (0.04)	$ 0.29
Weighted average common shares outstanding (See Note 13):		
Basic	77,735	81,871
Diluted	77,735	82,323
Comprehensive income (See Note 14)	1,179	$ 21,028

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

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

	March 31, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 591,906	$ 276,402
Short-term investments	71,194	32,694
Trade accounts receivable, net of allowances of $5,050 and $4,879	241,092	259,327
Inventories, net	403,422	389,608
Prepaid Expenses	72,667	67,362
Other Current Assets	35,369	32,643
Total current assets	1,415,650	1,058,036
Property, plant and equipment, net	345,356	340,199
Right of use asset - operating leases	151,834	156,184
Intangible assets, net	1,022,609	1,067,833
Goodwill	1,040,235	1,055,462
Deferred tax assets, net	34,175	46,080
Other assets	68,365	58,194
Total assets	$ 4,078,224	$ 3,781,988
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of borrowings under senior credit facility	$ 19,375	$ 14,531
Current portion of lease liability - operating leases	16,303	15,284
Accounts payable, trade	94,397	92,326
Contract liabilities	7,841	8,540
Accrued compensation	52,582	75,455
Accrued expenses and other current liabilities	111,896	100,844
Total current liabilities	302,394	306,980
Long-term borrowings under senior credit facility	1,171,036	825,563
Long-term borrowings under securitization facility	94,600	89,200
Long-term convertible securities	570,984	570,255
Lease liability - operating leases	170,082	166,849
Deferred tax liabilities	31,431	35,317
Other liabilities	139,745	199,940
Total liabilities	2,480,272	2,194,104
Stockholders' equity:		
Preferred stock; no par value; 15,000 authorized shares; none outstanding	—	—
Common stock; $0.01 par value; 240,000 authorized shares; 91,484 and 90,920 issued at March 31, 2024 and December 31, 2023, respectively	915	909
Additional paid-in capital	1,310,527	1,302,484
Treasury stock, at cost; 12,735 shares and 12,751 shares at March 31, 2024 and December 31, 2023, respectively	(646,422)	(647,262)
Accumulated other comprehensive loss	(10,646)	(15,106)
Retained earnings	943,578	946,859
Total stockholders' equity	1,597,952	1,587,884
Total liabilities and stockholders' equity	$ 4,078,224	$ 3,781,988

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

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

	Three Months Ended March 31,	
	2024	**2023**
OPERATING ACTIVITIES:		
Net (Loss) Income	$ (3,281)	$ 24,226
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	30,566	31,143
Non-cash impairment charges	$ 7,064	—
Deferred income tax provision (benefit)	(2,856)	1,953
Share-based compensation	5,599	3,620
Amortization of debt issuance costs and expenses associated with debt refinancing	1,398	1,890
Non-cash lease expense	149	1,260
Loss (gain) on disposal of property and equipment	12	(23)
Change in fair value of contingent consideration and others	456	4,699
Changes in assets and liabilities:		
Accounts receivable	16,827	10,041
Inventories	(19,021)	(25,423)
Prepaid expenses and other current assets	(2,676)	(2,164)
Other non-current assets	339	(6,009)
Accounts payable, accrued expenses and other current liabilities	(19,210)	(4,984)
Contract liabilities	(1,498)	430
Other non-current liabilities	1,888	(14,503)
Net cash provided by operating activities	15,756	26,156
INVESTING ACTIVITIES:		
Purchases of property and equipment	(15,465)	(13,704)
Purchases of Investments	(38,500)	—
Net cash used in investing activities	(53,965)	(13,704)
FINANCING ACTIVITIES:		
Proceeds from borrowings of long-term indebtedness	370,500	10,200
Payments on debt	(15,100)	(12,400)
Payment of debt issuance costs	—	(7,578)
Purchases of treasury stock	—	(150,000)
Proceeds from exercised stock options	6,398	2,326
Cash taxes paid in net equity settlement	(3,122)	(5,231)
Net cash provided by (used in) financing activities	358,676	(162,683)
Effect of exchange rate changes on cash and cash equivalents	(4,963)	937
Net increase (decrease) in cash and cash equivalents	315,504	(149,294)
Cash and cash equivalents at beginning of period	276,402	456,661
Cash and cash equivalents at end of period	$ 591,906	$ 307,367

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(UNAUDITED)
(Dollars in thousands)

	Three Months Ended March 31, 2024							
	Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Equity
	Shares	Amount	Shares	Amount				
Balance, January 1, 2024	90,920	$ 909	(12,751)	$ (647,262)	$ 1,302,484	$ (15,106)	$ 946,859	$ 1,587,884
Net loss	—	—	—	—	—	—	(3,281)	(3,281)
Other comprehensive income (loss), net of tax	—	—	—	—	—	4,460	—	4,460
Issuance of common stock through employee stock purchase plan	23	—	—	—	965	—	—	965
Issuance of common stock for vesting of share based awards, net of shares withheld for taxes	541	2	16	840	1,470	—	—	2,312
Share-based compensation	—	4	—	—	5,608	—	—	5,612
Accelerated shares repurchased	—	$ —	—	—	—	$ —	—	—
Balance, March 31, 2024	91,484	$ 915	(12,735)	$ (646,422)	$ 1,310,527	$ (10,646)	$ 943,578	$ 1,597,952

	Three Months Ended March 31, 2023							
	Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Equity
	Shares	Amount	Shares	Amount				
Balance, January 1, 2023	90,476	$ 905	(6,823)	$ (362,862)	$ 1,276,977	$ 10,265	$ 879,118	$ 1,804,403
Net income	—	—	—	—	—	—	24,226	24,226
Other comprehensive income (loss), net of tax	—	—	—	—	—	(3,198)	—	(3,198)
Issuance of common stock through employee stock purchase plan	21	—	—	—	1,107	—	—	1,107
Issuance of common stock for vesting of share based awards, net of shares withheld for taxes	316	1	16	846	(4,858)	—	—	(4,011)
Share-based compensation	—	2	—	—	3,609	—	—	3,611
Accelerated shares repurchased	—	—	(2,111)	(119,662)	(31,538)	—	—	(151,200)
Balance, March 31, 2023	90,813	$ 908	(8,918)	$ (481,678)	$ 1,245,297	$ 7,067	$ 903,344	$ 1,674,938

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

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

1. BASIS OF PRESENTATION

General

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

In the opinion of management, the March 31, 2024 unaudited condensed consolidated financial statements contain all adjustments (consisting only of normal recurring adjustments) necessary for a fair statement of the financial position, statement of changes in shareholders' equity, results of operations and cash flows of the Company. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles in the United States ("GAAP") have been condensed or omitted in accordance with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's consolidated financial statements for the year ended December 31, 2023 included in the Company's Annual Report on Form 10-K. The December 31, 2023 consolidated balance sheet was derived from audited financial statements, but does not include all disclosures required by GAAP. Operating results for the three-month period ended March 31, 2024 are not necessarily indicative of the results to be expected for the entire year.

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

Recent Accounting Pronouncements

In March 2020, the Financial Accounting Standards Board ("FASB") issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, and, in January 2021, subsequently amended the initial guidance in ASU 2021-01, *Reference Rate Reform (Topic 848): Scope* (collectively, "Topic 848"). Topic 848 provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The amendments apply only to contracts, hedging relationships, and other transactions that reference London Inter-Bank Offered Rate ("LIBOR") or another reference rate expected to be discontinued because of reference rate reform. In December 2022, the FASB issued ASU 2022-06*, Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848*, which delayed the effective date from December 31, 2022 to December 31, 2024. The Alternative Reference Rates Committee, a group of private-market participants convened by the U.S. Federal Reserve Board and the New York Federal Reserve, has recommended the use of the Secured Overnight Financing Rate ("SOFR") as a more robust reference rate alternative to LIBOR. On March 24, 2023, the Company entered into the seventh amendment and restatement (the "March 2023 Amendment") of its Senior Credit Facility (the "Senior Credit Facility") with a syndicate of lending banks with Bank of America, N.A., as Administrative Agent. In connection with the March 2023 Amendment, the Company replaced all LIBOR-based contracts with SOFR, which is calculated based on overnight transactions under repurchase agreements backed by Treasury securities. In addition, on April 17, 2023 the Company entered into an amendment (the "April 2023 Amendment") of the Securitization Facility (as defined below) and amended the interest rate from LIBOR to SOFR indexed rate. (See *Note 6, Debt*). In March 2023, the Company entered into a basis swap where the Company receives Term SOFR and pays LIBOR to convert the portfolio of interest rate swaps from LIBOR to SOFR. Integra has elected to adopt the optional expedient under Topic 848, which will allow the interest rate swap hedging relationship to continue, without de-designation, due to the change in the indexed rate from LIBOR to SOFR.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures* which enhances the transparency of income tax disclosures by expanding annual disclosure requirements related to the rate reconciliation and income taxes paid. The amendments are effective for fiscal years beginning after December 15, 2023, and for interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. The amendments should be applied retrospectively to all prior periods presented in the financial statements. The Company does not plan to early adopt and is currently evaluating this ASU to determine its impact on the Company's disclosures.

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*, which updates reportable segment disclosure requirements primarily through enhanced disclosures about significant segment expenses. The amendments are effective for fiscal years beginning after December 15, 2023, and for interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. The amendments should be applied retrospectively to all prior periods presented in the financial statements. The Company does not plan to early adopt and is currently evaluating this ASU to determine its impact on the Company's disclosures.

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

2. ACQUISITIONS AND DIVESTITURES

Acquisition of Acclarent Inc.

In December 2023, the Company entered into a definitive agreement to acquire Acclarent, Inc. ("Acclarent") from Ethicon, Inc., a subsidiary of Johnson & Johnson, for $275.0 million in cash at closing, subject to customary purchase price adjustments, and an additional $5.0 million contingent upon the achievement of a regulatory milestone, which was achieved prior to closing. Acclarent is a developer and marketer of medical devices used in Ear, Nose, Throat ("ENT") procedures. Acclarent's results of operations will be reported in the Company's Codman Specialty Surgical reportable segment from the date of acquisition.

On April 1, 2024, the Company successfully completed the acquisition of 100% of Acclarent for approximately $282.0 million in cash, subject to customary adjustments set forth in the purchase agreement related to working capital balances transferred to the Company. To facilitate the completion of the acquisition of Acclarent, the Company drew from the revolving portion of the Senior Credit Facility during the three months ended March 31, 2024. For further detail on the Company's additional borrowings, see *Note 6. Debt*.

3. REVENUES FROM CONTRACTS WITH CUSTOMERS

Summary of Accounting Policies on Revenue Recognition

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

Performance Obligations

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

Significant Estimates

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

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

The Company's return policy, as set forth in its product catalogs and sales invoices, requires review and authorization in advance prior to the return of product. Upon the authorization, a credit will be issued for the goods returned within a set amount of days from the shipment, which is generally 90 days.

In 2023, due to the voluntary recall of all products manufactured at the Boston facility, including PriMatrix®, SurgiMend®, Revize™, and TissueMend™ (the "Boston recall"), the Company recorded a total of $18.7 million provision for product returns. As of March 31, 2024, the Company has credited $16.7 million to customers and holds a remaining return reserve of $2.0 million.

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

Contract Asset and Liability

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

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

The following table summarizes the changes in the contract asset and liability balances for the three months ended March 31, 2024:

Dollars in thousands		Total
Contract Asset		
Contract asset, January 1, 2024	$	9,233
Transferred to trade receivable from contract asset included in beginning of the year contract asset		(9,233)
Contract asset, net of transferred to trade receivables on contracts during the period		7,478
Contract asset, March 31, 2024	$	7,478
Contract Liability		
Contract liability, January 1, 2024	$	16,252
Recognition of revenue included in beginning of year contract liability		(3,523)
Contract liability, net of revenue recognized on contracts during the period		2,017
Foreign currency translation		(63)
Contract liability, March 31, 2024	$	14,683

At March 31, 2024, the short-term portion of the contract liability of $7.8 million and the long-term portion of $6.9 million are included in current liabilities and other liabilities, respectively, in the consolidated balance sheets.

As of March 31, 2024, the Company is expected to recognize revenue of approximately 53% of unsatisfied (or partially unsatisfied) performance obligations as revenue within 12 months, with the remaining balance to be recognized thereafter.

Shipping and Handling Fees

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

Product Warranties

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

Taxes Collected from Customers

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

Disaggregated Revenue

The following table presents revenues disaggregated by the major sources of revenues for the three months ended March 31, 2024 and 2023 (dollar amounts in thousands):

	Three Months Ended March 31, 2024	Three Months Ended March 31, 2023
Neurosurgery	$ 202,268	$ 192,870
Instruments	54,166	55,266
Total Codman Specialty Surgical	256,434	248,136
Wound Reconstruction and Care	80,877	100,940
Private Label	31,561	31,770
Total Tissue Technologies	112,438	132,710
Total revenue	$ 368,872	$ 380,846

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

4. INVENTORIES

Inventories, net consisted of the following:

Dollars in thousands	March 31, 2024	December 31, 2023
Finished goods	$ 192,287	$ 196,402
Work in process	83,334	74,035
Raw materials	127,801	119,171
Total inventories, net	$ 403,422	$ 389,608

5. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill

Changes in the carrying amount of goodwill for the three-month period ended March 31, 2024 were as follows:

Dollars in thousands	Codman Specialty Surgical	Tissue Technologies	Total
Goodwill at December 31, 2023	$ 666,937	$ 388,525	$ 1,055,462
Foreign currency translation	(9,622)	(5,605)	(15,227)
Goodwill at March 31, 2024	$ 657,315	$ 382,920	$ 1,040,235

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

The Company tests for impairment by either performing a qualitative evaluation or a quantitative test. The qualitative evaluation is an assessment of factors, including reporting unit specific operating results as well as industry, market and general economic conditions, to determine whether it is more likely than not that the fair values of a reporting unit is less than its carrying amount, including goodwill. The Company may elect to bypass this qualitative evaluation for some or all of its reporting units and perform a quantitative test. The quantitative test estimates the fair value of the reporting unit using a

discounted cash flow model, which incorporates significant estimates and assumptions made by management which, by their nature, are characterized by uncertainty.

Due to third-party audit findings and an update to the estimated timeframe to resume the commercial distribution of products manufactured in the Boston facility, the Company elected to perform a quantitative analysis of its Tissue Technologies reporting unit in the first quarter of 2024 in accordance with ASC 350. The quantitative test estimates the fair value of the reporting unit using a discounted cash flow model, which incorporates significant estimates and assumptions made by management with respect to future revenue and expense growth rates and discount rates which, by their nature, are characterized by uncertainty. An impairment loss is recognized when the reporting unit's carrying amount exceeds its estimated fair value. The quantitative test utilized a terminal growth rate of 2%, a discount rate of 15%, and a range and application of the company guideline multiples. The Company determined, after performing the quantitative analysis, that the fair value of the Tissue Technologies reporting unit was not less than its carrying amount, with 20% headroom.

Other Intangible Assets

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

		March 31, 2024		
Dollars in thousands	Weighted Average Life	Cost	Accumulated Amortization	Net
Completed technology	18 years	$ 1,209,921	$ (460,545)	$ 749,376
Customer relationships	12 years	$ 167,360	$ (134,587)	$ 32,773
Trademarks/brand names	28 years	$ 97,668	$ (39,330)	$ 58,338
Codman tradename	Indefinite	$ 168,678	$ —	$ 168,678
Supplier relationships	30 years	$ 30,211	$ (18,393)	$ 11,818
All other	11 years	$ 6,052	$ (4,426)	$ 1,626
		$ 1,679,890	$ (657,281)	$ 1,022,609

		December 31, 2023		
Dollars in thousands	Weighted Average Life	Cost	Accumulated Amortization	Net
Completed technology	18 years	$ 1,226,128	$ (448,519)	$ 777,609
Customer relationships	12 years	193,895	(152,160)	41,735
Trademarks/brand names	28 years	98,892	(38,754)	60,138
Codman tradename	Indefinite	174,531	—	174,531
Supplier relationships	30 years	30,211	(18,148)	12,063
All other	11 years	6,180	(4,423)	1,757
		$ 1,729,837	$ (662,004)	$ 1,067,833

Total amortization of intangible assets for the three months ended March 31, 2024 was $27.7 million. Of these amounts, $17.6 million was related to amortization of technology based intangibles and included in cost of goods sold. $7.1 million related to the impairment of a customer relationship intangible and the remainder were included in intangible amortization in the statement of operations.

Total amortization of intangible assets for the three months ended March 31, 2023 was $20.6 million. Of these amounts, $17.5 million was related to amortization of technology based intangibles and included in cost of goods sold, with the remainder included in intangible amortization in the statement of operations.

Based on quarter-end exchange rates, amortization expense (including amounts reported in cost of goods sold) is expected to be approximately $60.1 million for the remainder of 2024, $80.2 million in 2025, $80.0 million in 2026, $79.1 million in 2027, $78.7 million in 2028, $74.9 million in 2029 and $403.5 million thereafter.

The Company periodically performs testing for impairment on certain long-lived assets whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

Due to third-party audit findings and an update to the estimated timeframe to resume the commercial distribution of products manufactured in the Boston facility, the Company elected to perform impairment testing on certain definite-lived intangible assets including completed technology and customer relationships in accordance with FASB ASC Topic 360, *Property, Plant and Equipment*. For the three months ended March 31, 2024, the Company recorded an impairment charge related to the definite-lived intangible asset associated with the customer relationships of $7.1 million in intangible asset amortization in the consolidated statement of operations. With respect to the definite-lived intangible assets associated with the completed technology of SurgiMend® and PriMatrix®, the carrying values are $38.3 million and $27.7 million, respectively, as of March 31, 2024. We determined that the carrying amount of these definite-lived intangible assets were recoverable and, therefore, the intangible assets were not deemed to be impaired.

6. DEBT

Amendment to the Seventh Amended and Restated Senior Credit Agreement

On March 24, 2023, the Company entered into the seventh amendment and restatement (the "March 2023 Amendment") of the Senior Credit Facility (the "Senior Credit Facility") with a syndicate of lending banks with Bank of America, N.A., as Administrative Agent. The March 2023 Amendment extended the maturity date to March 24, 2028, amended the contractual repayments of the term loan component, and amended the interest rate from LIBOR to SOFR-indexed interest. The Company continues to have the aggregate principal amount of up to approximately $2.1 billion available to it through the following facilities: (i) a $775.0 million term loan facility, and (ii) a $1.3 billion revolving credit facility, which includes a $60 million sublimit for the issuance of standby letters of credit and a $60 million sublimit for swingline loans.

The Company's maximum consolidated total leverage ratio in the financial covenants (as defined in the Senior Credit Facility) was modified to the following:

Fiscal Quarter Ending	Maximum Consolidated Total Leverage Ratio
March 31, 2023 through December 31, 2024	4.50 to 1.00
March 31, 2025 through June 30, 2026	4.25 to 1.00
September 30, 2026 and the last day of each fiscal quarter thereafter	4.00 to 1.00

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

i. Term SOFR in effect from time to time plus 0.10% plus the applicable rate (ranging from 1.00% to 1.75%), or

ii. The highest of:

   1. the weighted average overnight Federal funds rate, as published by the Federal Reserve Bank of New York, plus 0.50%;
   2. the prime lending rate of Bank of America, N.A.; or
   3. the one-month Term SOFR plus 1.00%.

The applicable rates are based on the Company's consolidated total leverage ratio (defined as the ratio of (a) consolidated funded indebtedness as of such date less cash that is not subject to any restriction on the use or investment thereof to (b) consolidated EBITDA (as defined by the amended Seventh Amended and Restated Credit Agreement (the "Credit Agreement")), for the period of four consecutive fiscal quarters ending on such date).

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

The Senior Credit Facility is collateralized by substantially all of the assets of the Company's U.S. subsidiaries, excluding intangible assets. The Senior Credit Facility is subject to various financial and negative covenants and, at March 31, 2024, the Company was in compliance with all such covenants. The Company capitalized $7.6 million in deferred financing costs in connection with the modification of the Senior Credit Facility and wrote off $0.2 million of previously capitalized financing costs during the first quarter of 2023.

At March 31, 2024 and December 31, 2023 there was $420.0 million and $70.0 million, respectively, outstanding under the revolving portion of the Senior Credit Facility. At March 31, 2024 and December 31, 2023, there was $775.0 million outstanding under the term loan component of the Senior Credit Facility at a weighted average interest rate of 6.8% and 6.8%, respectively. As of March 31, 2024 and December 31, 2023 there was $19.4 million and $14.5 million, respectively, of the term loan component of the Senior Credit Facility classified as current on the condensed consolidated balance sheet.

The fair value of outstanding borrowings of the Senior Credit Facility's term loan component at March 31, 2024 was $765.5 million. This fair value was determined by using a discounted cash flow model based on current market interest rates available to the Company. These inputs are corroborated by observable market data for similar liabilities and therefore classified within Level 2 of the fair value hierarchy. Level 2 inputs represent inputs that are observable for the asset or liability, either directly or indirectly, and are other than active market observable inputs that reflect unadjusted quoted prices for identical assets or liabilities.

Letters of credit outstanding as of March 31, 2024 and December 31, 2023 totaled $1.7 million. There were no amounts drawn under the letters of credit outstanding as of March 31, 2024.

Contractual repayments of the term loan component of the Senior Credit Facility are due as follows:

As of March 31, 2024	Principal Repayment
Dollars in thousands	
Remainder of 2024	$ 14,531
2025	33,906
2026	38,750
2027	53,281
Thereafter	634,532
	$ 775,000

Future interest payments on the term loan component of the Senior Credit Facility based on current interest rates are expected to approximate $39.3 million for the remainder of 2024, $50.8 million in 2025, $48.1 million in 2026, $45.0 million in 2027, and $10.0 million thereafter. Interest is calculated on the term loan portion of the Senior Credit Facility based on SOFR plus the certain amounts set forth in the Credit Agreement. As the revolving credit facility and Securitization Facility (defined below) can be repaid at any time, no interest has been included in the calculation.

Any outstanding borrowings on the revolving credit component of the Senior Credit Facility are due on March 24, 2028.

Convertible Senior Notes

On February 4, 2020, the Company issued $575.0 million aggregate principal amount of its 0.5% Convertible Senior Notes due 2025 (the "2025 Notes"). The 2025 Notes will mature on August 15, 2025 and bear interest at a rate of 0.5% per annum payable semi-annually in arrears, unless earlier converted, repurchased or redeemed in accordance with the terms of the 2025 Notes. In connection with this offering, the Company capitalized $13.2 million of financing fees.

The 2025 Notes are senior, unsecured obligations of the Company, and are convertible into cash and shares of its common stock based on an initial conversion rate, subject to adjustment of 13.5739 shares per $1,000 principal amounts of the 2025 Notes (which represents an initial conversion price of $73.67 per share). The 2025 Notes convert only in the following circumstances: (1) if the closing price of the Company's common stock has been at least 130% of the conversion price during the period; (2) if the average trading price per $1,000 principal amount of the 2025 Notes is less than or equal to 98% of the average conversion value of the 2025 Notes during a period as defined in the indenture; (3) if the Company calls the notes for optional redemption as defined in the indenture; or (4) if specified corporate transactions occur. As of March 31, 2024, none of these conditions existed and the 2025 Notes are classified as long term obligations.

On December 9, 2020, the Company entered into the First Supplemental Indenture to the original indenture dated as of February 4, 2020 (the "Indenture") between the Company and Citibank, N.A., as trustee, governing the Company's outstanding 2025 Notes. The Company irrevocably elected (1) to eliminate the Company's option to choose physical settlement on any conversion of the 2025 Notes that occurs on or after the date of the First Supplemental Indenture and (2) with respect to any Combination Settlement (as defined in the indenture) for a conversion of the 2025 Notes, the Specified Dollar Amount (as defined in the indenture) that will be settled in cash per $1,000 principal amount of the 2025 Notes shall be no lower than $1,000.

Holders of the 2025 Notes will have the right to require the Company to repurchase for cash all or a portion of their 2025 Notes at 100% of their principal amount, plus any accrued and unpaid interest, upon the occurrence of a fundamental change (as defined in the indenture relating to the 2025 Notes). The Company will also be required to increase the conversion rate for holders who convert their 2025 Notes in connection with certain fundamental changes occurring prior to the maturity date or following delivery by the Company of a notice of redemption.

In connection with the issuance of the 2025 Notes, the Company entered into call transactions and warrant transactions, primarily with affiliates of the initial purchasers of the 2025 Notes (the "hedge participants"). The cost of the call transactions was $104.2 million for the 2025 Notes. The Company received $44.5 million of proceeds from the warrant transactions for the 2025 Notes. The call transactions involved purchasing call options from the hedge participants, and the warrant transactions involved selling call options to the hedge participants with a higher strike price than the purchased call options. The initial strike price of the call transactions was $73.67, subject to anti-dilution adjustments substantially similar to those in the 2025 Notes. The initial strike price of the warrant transactions was $113.34 for the 2025 Notes, subject to customary anti-dilution adjustments.

At March 31, 2024, the carrying amount of the liability was $575.0 million. The fair value of the 2025 Notes at March 31, 2024 was $549.7 million. Factors that the Company considered when estimating the fair value of the 2025 Notes included recent quoted market prices or dealer quotes. The 2025 Notes are valued based on Level 1 measurements in the fair value hierarchy.

Securitization Facility

In 2018, the Company entered into an accounts receivable securitization facility (the "Securitization Facility") under which accounts receivable of certain domestic subsidiaries are sold on a non-recourse basis to a special purpose entity ("SPE"), which is a bankruptcy-remote, consolidated subsidiary of the Company. Accordingly, the assets of the SPE are not available to satisfy the obligations of the Company or any of its subsidiaries. From time to time, the SPE may finance such accounts receivable with a revolving loan facility secured by a pledge of such accounts receivable. The amount of outstanding borrowings on the Securitization Facility at any one time is limited to $150.0 million. The Securitization Facility Agreement ("Securitization Agreement") governing the Securitization Facility contains certain covenants and termination events. An occurrence of an event of default or a termination event under this Securitization Agreement may give rise to the right of its counterparty to terminate this facility. As of March 31, 2024, the Company was in compliance with the covenants and none of the termination events had occurred.

On December 15, 2023, the Company entered into an amendment (the "December 2023 Amendment") of the Securitization Facility which extended the maturity date from May 28, 2024 to December 15, 2026. The Company incurred approximately $0.3 million of new issuance costs associated with the December Amendment which will be amortized over 3 years, the length of the Securitization Agreement as amended by the December 2023 Amendment. Due to the increase in borrowing capacity, the remaining $0.1 million of unamortized costs from the previous agreement will also be amortized over the length of the amended agreement, 3 years. In addition, on April 17, 2023 the Company entered into an amendment (the "April 2023 Amendment") of the Securitization Facility and amended the interest rate from LIBOR to SOFR-indexed rate. The December 2023 Amendment and April 2023 Amendment did not increase the Company's total indebtedness.

At March 31, 2024 and December 31, 2023, the Company had $94.6 million and $89.2 million, respectively, of outstanding borrowings under its Securitization Facility at a weighted average interest rate of 6.5% and 5.9%, respectively. The fair value of the outstanding borrowing of the Securitization Facility at March 31, 2024 was $92.7 million. These fair values were determined by using a discounted cash flow model based on current market interest rates available to the Company. These inputs are corroborated by observable market data for similar liabilities and therefore classified within Level 2 of the fair value hierarchy. Level 2 inputs represent inputs that are observable for the asset or liability, either directly or indirectly, and are other than active market observable inputs that reflect unadjusted quoted prices for identical assets or liabilities.

7. DERIVATIVE INSTRUMENTS

Interest Rate Hedging

The Company's interest rate risk relates to U.S. dollar denominated variable interest rate borrowings. The Company uses interest rate swap derivative instruments to manage earnings and cash flow exposure resulting from changes in interest rates. These interest rate swaps apply a fixed interest rate on a portion of the Company's expected SOFR-indexed borrowings. In March 2023, the Company entered into a basis swap where the Company receives Term SOFR and pays daily compounded SOFR to convert the portfolio of swaps from daily compounded SOFR to term SOFR.

The Company held the following interest rate swaps as of March 31, 2024 and December 31, 2023 (dollar amounts in thousands):

	March 31, 2024	December 31, 2023					March 31, 2024	December 31, 2023
Hedged Item	Notional Amount		Designation Date	Effective Date	Termination Date	Fixed Interest Rate	Estimated Fair Value	
							Asset (Liability)	
1-month Term SOFR Loan	150,000	150,000	December 13, 2017	July 1, 2019	June 30, 2024	2.423 %	1,125	2,105
1-month Term SOFR Loan	200,000	200,000	December 13, 2017	January 1, 2018	December 31, 2024	2.313 %	4,341	4,978
1-month Term SOFR Loan	75,000	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.220 %	1,556	1,349
1-month Term SOFR Loan	75,000	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.199 %	1,548	1,312
1-month Term SOFR Loan	75,000	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.209 %	1,548	1,346
1-month Term SOFR Loan	100,000	100,000	December 18, 2018	December 30, 2022	December 31, 2027	2.885 %	4,512	3,015
1-month Term SOFR Loan	100,000	100,000	December 18, 2018	December 30, 2022	December 31, 2027	2.867 %	4,519	3,052
1-month Term SOFR Loan	575,000	575,000	December 15, 2020	July 31, 2025	December 31, 2027	1.415 %	29,267	22,965
1-month Term SOFR Loan	125,000	125,000	December 15, 2020	July 1, 2025	December 31, 2027	1.404 %	6,770	5,263
Basis Swap [1]	—	—	March 31, 2023	March 24, 2023	December 31, 2027	N/A	(2,127)	0 (1,829)
	$ 1,475,000	$ 1,475,000					$ 53,059	$ 43,556

[1] The notional of the basis swap amortizes to match the total notional of the interest rate swap portfolio over time

The interest rate swaps were carried on the consolidated balance sheet at fair value and changes in the fair values were recorded as unrealized gains or losses in accumulated other comprehensive income ("AOCI"). For the three months ended March 31, 2024 and 2023, the Company recorded a gain of $14.7 million and a loss of $10.5 million, respectively, in AOCI related to the change in fair value of the interest rate swaps.

For the three months ended March 31, 2024 and 2023, the Company recorded gains of $5.2 million and $3.5 million, respectively, in the consolidated statements of operations related to the interest rate differential of the interest rate swaps. The estimated gain that is expected to be reclassified to interest income from AOCI as of March 31, 2024 within the next twelve months is $13.6 million.

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

Foreign Currency Hedging

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

The success of the Company's hedging anticipated currency exchange gains or losses to the extent that there are differences between forecasted and actual activities during periods of currency volatility. In addition, changes in currency exchange rates related to any unhedged transactions may affect earnings and cash flows.

Cross-Currency Rate Swaps

The objective of these cross-currency swaps is to reduce volatility of earnings and cash flows associated with changes in the foreign currency exchange rate. Under the terms of these contracts, which have been designated as cash flow hedges, the Company will make interest payments in Swiss francs ("CHFs") and receive interest in U.S. dollars. Upon the maturity of these contracts, the Company will pay the principal amount of the loans in CHFs and receive U.S. dollars from the counterparties.

On September 22, 2023, the Company amended the Swiss franc denominated intercompany loan to partially settle CHF 20.0 million and extend the termination date to September 2024 and as a result, the Company terminated the cross-currency swap designated as cash flow hedge of an intercompany loan with aggregate notional amount of $48.5 million. Simultaneously, the Company entered into a cross-currency swap agreement to hedge a notional amount of CHF 28.5 million equivalent to $31.5 million of this amended intercompany loan into U.S. dollars. The loss recorded by the Company upon the settlement of the swap was not material for the period.

On December 21, 2020, the Company entered into cross-currency swap agreements to convert a notional amount of $471.6 million equivalent to 420.1 million of a CHF-denominated intercompany loan into U.S. dollars. The CHF-denominated intercompany loan was the result of an intra-entity transfer of certain intellectual property rights to a subsidiary in Switzerland completed during the fourth quarter of 2020. The intercompany loan requires quarterly payments of CHF 5.8 million plus accrued interest. As a result, the aggregate notional amount of the related cross-currency swaps will decrease by a corresponding amount.

The Company held the following cross-currency rate swaps as of March 31, 2024 and December 31, 2023 (dollar amounts in thousands):

					March 31, 2024	December 31, 2023	March 31, 2024	December 31, 2023
	Effective Date	Termination Date	Fixed Rate	Aggregate Notional Amount			Fair Value Asset (Liability)	
Pay CHF	December 21, 2020	December 22, 2025	3.00%	CHF	333,887	351,137	(9,902)	(38,324)
Receive U.S.$			3.98%	$	374,817	394,183		
Pay CHF	September 22, 2023	September 29, 2024	2.40%	CHF	28,500	28,500	(2,578)	(2,348)
Receive U.S.$			6.27%	$	31,457	31,457		
Total							$ (12,480)	$ (40,672)

The cross-currency swaps are carried on the consolidated balance sheet at fair value, and changes in the fair values are recorded as unrealized gains or losses in AOCI. For the three months ended March 31, 2024 the Company recorded a gain of $30.1 million in other income, net related to change in fair value related to the foreign currency rate translation to offset the losses recognized on the intercompany loans. For the three months ended March 31, 2023, the Company recorded a loss of $4.9 million in other income, net related to change in fair value related to the foreign currency rate translation to offset the losses recognized on the intercompany loans.

For the three months ended March 31, 2024, the Company recorded a gain of $29.5 million in AOCI related to change in fair value of the cross-currency swaps. For the three months ended March 31, 2023, the Company recorded a gain of $2.2 million in AOCI related to change in fair value of the cross-currency swaps.

For the three months ended March 31, 2024, the Company recorded a gain of $1.3 million in other income, net included in the consolidated statements of operations related to the interest rate differential of the cross-currency swaps. For the three months ended March 31, 2023, the Company recorded a gain of $1.5 million in other income, net included in the consolidated statements of operations related to the interest rate differential of the cross-currency swaps.

The estimated loss that is expected to be reclassified to other income (expense), net from AOCI as of March 31, 2024 within the next twelve months is $1.9 million. As of March 31, 2024, the Company does not expect any gains or losses will be reclassified into earnings because the original forecasted transactions will not occur.

Net Investment Hedges

The Company manages certain foreign exchange risks through a variety of strategies, including hedging. The Company is exposed to foreign exchange risk from its international operations through foreign currency purchases, net investments in foreign subsidiaries, and foreign currency assets and liabilities created in the normal course of business. On October 1, 2018 May 24, 2022, and November 17, 2023, the Company entered into cross-currency swap agreements designated as net investment hedges to partially offset the effects of foreign currency on foreign subsidiaries.

The Company held the following cross-currency rate swaps designated as net investment hedges as of March 31, 2024 and December 31, 2023, respectively (dollar amounts in thousands):

				March 31, 2024	December 31, 2023	March 31, 2024	December 31, 2023
	Effective Date	Termination Date	Fixed Rate	Aggregate Notional Amount		Fair Value Asset (Liability)	
Pay EUR Receive U.S.$	October 3, 2018	September 30, 2025	—% 2.19%	EUR 38,820 $ 45,000	38,820 45,000	3,459	2,475
Pay CHF Receive U.S.$	May 26, 2022	December 16, 2028	—% 1.94%	CHF 288,210 $ 300,000	288,210 300,000	(29,614)	(48,047)
Pay CHF Receive U.S.$	November 21, 2023	December 17, 2029	—% 2.54%	CHF 66,525 $ 75,000	66,525 75,000	(736)	(4,037)
Total						$ (26,891)	$ (49,609)

The cross-currency swaps were carried on the consolidated balance sheet at fair value and changes in the fair values were recorded as unrealized gains or losses in AOCI. For the three months ended March 31, 2024, the Company recorded a gain of $24.9 million in AOCI related to the change in fair value of the cross-currency swaps. For the three months ended March 31, 2023, the Company recorded a gain of $1.0 million in AOCI related to change in fair value of the cross-currency swaps.

For the three months ended March 31, 2024, the Company recorded a gain of $2.2 million in interest income included in the consolidated statements of operations related to the interest rate differential of the cross-currency swaps. For the three months ended March 31, 2023, the Company recorded a gain of $2.1 million in interest income included in the consolidated statements of operations related to the interest rate differential of the cross-currency swaps.

The estimated gain that is expected to be reclassified to interest income from AOCI as of March 31, 2024 within the next twelve months is $4.1 million.

On May 2, 2024, the Company entered into a cross-currency swap agreement with a notional amount of CHF 68.5 million, equivalent to $75.0 million, where the Company agreed with third-parties to sell Swiss francs in exchange for U.S. dollars at a specified rate at the maturity of the contract. The new cross-currency swap agreement was designated as a net investment hedge to partially offset the effects of foreign currency on foreign subsidiaries.

Foreign Currency Forward Contracts

The Company has entered into a hedge for forecasted intercompany purchases denominated in foreign currencies through the use of forward contracts designated as cash flow hedges. To the extent these forward contracts meet hedge accounting criteria, changes in their fair value are not included in accumulated comprehensive loss. These changes in fair value will be recognized into earnings as a component of cost of sales when the forecasted-transaction occurs.

In the first quarter of 2024, the Company entered into foreign currency forwards to mitigate the exchange rate risk of Swiss franc denominated intercompany purchases. These contracts typically settle at various dates within twelve months of execution. As of March 31, 2024 the notional amount of foreign currency forward contracts was CHF13.3 million. For the three months ended March 31, 2024 the Company recorded a loss of $0.6 million in AOCI related to the change in fair value of the foreign currency forward contracts and a loss of $0.1 million in cost of goods sold included in the consolidated statements of operations.

Counterparty Credit Risk

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

Fair Value of Derivative Instruments

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

The following table summarizes the fair value for derivatives designated as hedging instruments in the condensed consolidated balance sheets as of March 31, 2024 and December 31, 2023:

	Fair Value as of	
Location on Balance Sheet [1]:	**March 31, 2024**	**December 31, 2023**
Dollars in thousands		
Derivatives designated as hedges — Assets:		
Prepaid expenses and other current assets		
Cash Flow Hedges		
Interest rate swap[2]	$ 14,188	$ 14,675
Cross-currency swap	680	537
Net Investment Hedges		
Cross-currency swap	4,084	2,938
Other assets		
Cash Flow Hedges		
Interest rate swap[2]	40,998	30,710
Cross-currency swap	—	—
Net Investment Hedges		
Cross-currency swap	2,454	1,470
Total derivatives designated as hedges — Assets	$ 62,404	$ 50,330
Derivatives designated as hedges — Liabilities:		
Accrued expenses and other current liabilities		
Cash Flow Hedges		
Interest rate swap[2]	$ 540	$ 579
Cross-currency swap	2,578	4,813
Foreign currency forward contracts	629	—
Net Investment Hedges		
Cross-currency swap	—	2,903
Other liabilities		
Cash Flow Hedges		
Interest rate swap[2]	1,586	1,250
Cross-currency swap	10,582	36,396
Net Investment Hedges		
Cross-currency swap	33,427	51,114
Total derivatives designated as hedges — Liabilities	$ 49,342	$ 97,055

[1] The Company classifies derivative assets and liabilities as current based on the cash flows expected to be incurred within the following 12 months.
[2] At March 31, 2024 and December 31, 2023, the total notional amounts related to the Company's interest rate swaps were $1.5 billion.

The following presents the effect of derivative instruments designated as cash flow hedges and net investment hedges on the accompanying condensed consolidated statement of operations during the three months ended March 31, 2024 and 2023:

Dollars in thousands	Balance in AOCI Beginning of Quarter	Amount of Gain (Loss) Recognized in AOCI	Amount of Gain (Loss) Reclassified from AOCI into Earnings	Balance in AOCI End of Quarter	Location in Statements of Operations
Three Months Ended March 31, 2024					
Cash Flow Hedges					
Interest rate swap	$ 43,556	$ 14,723	$ 5,219	$ 53,060	Interest expense
Cross-currency swap	(15,763)	29,532	31,473	(17,704)	Other income (expense), net
Foreign currency forward contract	—	(629)	(110)	(519)	Cost of sales
Net Investment Hedges					
Cross-currency swap	(45,498)	24,920	2,202	(22,780)	Interest income
	$ (17,705)	$ 68,546	$ 38,784	$ 12,057	
Three Months Ended March 31, 2023					
Cash Flow Hedges					
Interest rate swap	$ 56,712	$ (10,534)	$ 3,500	$ 42,678	Interest expense
Cross-currency swap	(20,271)	2,191	(3,504)	(14,576)	Other income (expense), net
Foreign currency forward contract		$ (69)		$ (69)	
Net Investment Hedges					
Cross-currency swap	(6,914)	950	2,096	(8,060)	Interest income
	$ 29,527	$ (7,462)	$ 2,092	$ 19,973	

Derivative Instruments not Designated Hedges:

During the second quarter of 2021, the Company entered into a foreign currency swap, with a notional amount of $7.3 million to mitigate the risk from fluctuations in foreign currency exchange rates associated with an intercompany loan denominated in Japanese yen. In a foreign currency swap transaction, the Company agrees with another party to exchange, at specified intervals, the difference between one currency and another currency at a fixed exchange rate, generally set at inception, calculated by reference to an agreed upon notional amount. The notional amount of each currency is exchanged at the inception and termination of the currency swap by each party. The Company subsequently paid down a portion of this swap, bringing the notional amount down to $5.5 million as of March 31, 2024.

The fair value of the foreign currency swaps not designated as hedges was $1.5 million and $1.2 million as of March 31, 2024 and December 31, 2023, respectively. The following table summarizes the gains (losses) on derivative instruments not designated as hedges on the condensed consolidated statements of income, which was included in other income:

Dollars in thousands	Three Months Ended March 31,	
	2024	2023
Foreign currency swaps	273	55
Total	$ 273	$ 55

8. STOCK-BASED COMPENSATION

As of March 31, 2024, the Company had stock options, restricted stock awards, performance stock awards, contract stock awards and restricted stock unit awards outstanding under the Integra LifeSciences Holdings Corporation Fifth Amended and Restated 2003 Equity Incentive Plan (the “2003 Plan”).

Stock options issued under the 2003 Plan become exercisable over specified periods, generally within four years from the date of grant for officers and employees, within one year from date of grant for directors which generally expire eight years from the grant date for employees, and from six to ten years for directors and certain executive officers, except in certain instances that result in accelerated vesting due to death, disability, retirement age or change in-control provisions within their grant agreements. The Company values stock option grants using the binomial distribution model. Restricted stock issued under the 2003 Plan vests over specified periods, generally three years after the date of grant. The vesting of performance stock issued under the 2003 Plan is subject to service and performance conditions.

Stock Options

As of March 31, 2024, there were approximately $4.9 million of total unrecognized compensation costs related to unvested stock options. These costs are expected to be recognized over a weighted-average period of approximately three years. There were 243,964 stock options granted during the three months ended March 31, 2024. For the three months ended March 31, 2024, the weighted average grant date fair value for stock options granted was $15.68 per option.

Awards of Restricted Stock and Performance Stock

Performance stock and restricted stock awards generally have requisite service periods of three years, except in certain instances that result in accelerated vesting due to death, disability, retirement age provision or change in-control provisions in their grant agreements. Performance stock units are subject to graded vesting conditions based on revenue goals of the Company. The Company expenses the fair value of restricted stock awards on a straight-line basis over the requisite service period. As of March 31, 2024, there was approximately $48.6 million of total unrecognized compensation costs related to these unvested awards. The Company expects to recognize these costs over a weighted-average period of approximately two years. The Company granted 532,379 restricted stock awards and 263,350 performance stock awards during the three months ended March 31, 2024. For the three months ended March 31, 2024, the weighted average grant date fair value for restricted stock awards and performance stock units granted was $36.46 and $36.22 per award, respectively.

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

CEO Separation

On February 27th, 2024, the Company announced that Mr. De Witte would retire from his position as President and Chief Executive Officer and director of the Company following the completion of a succession process and entered into a letter agreement with Mr. De Witte to modify his current employment agreement and put forth the form of a post-employment consulting agreement. The Company applied modification accounting to the outstanding equity-based awards granted to Mr. De Witte as of that date, which revalued and accelerated stock-based compensation associated with equity-based awards granted to him over his expected service period to the Company. Pursuant to this letter agreement, Mr. De Witte’s unvested equity-based awards will continue to vest during his continued service period to the Company and vested stock options were modified such that they will remain exercisable until the lesser of (a) the stated term of the stock options and (b) six months following his cessation of continued service to the Company. As a result of the modifications, the Company recorded incremental stock-based compensation expense of $0.2 million during the three months ended March 31, 2024. The Company will record a total of $1.9 million in accelerated stock-based compensation expenses for the twelve months ended 2024 that would not have been recognized if Mr. De Witte had not announced his retirement from Integra.

9. RETIREMENT PLANS

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

Net periodic benefit costs for the Company’s defined benefit pension plans for the three months ended March 31, 2024 were $0.4 million. The components of the net periodic benefit costs other than the service cost component of $0.8 million for the three months ended March 31, 2024 are included in other income, net in the consolidated statements of operations.

Net periodic benefit costs for the Company’s defined benefit pension plans for the three months ended March 31, 2023 were $0.3 million. The components of the net periodic benefit costs other than the service cost component of $0.5 million for the three months ended March 31, 2023 are included in other income, net in the consolidated statements of operations.

The estimated fair values of plan assets were $40.4 million and $45.7 million as of March 31, 2024 and December 31, 2023, respectively. The net plan assets of the pension plans are invested in common trusts as of March 31, 2024 and December 31, 2023. Common trusts are classified as Level 2 in the fair value hierarchy. The fair value of common trusts is valued at the net asset value based on the fair values of the underlying investments of the trusts as determined by the sponsor of the trusts. The investment strategy of the Company's defined benefit plans is both to meet the liabilities of the plans as they fall due and to maximize the return on invested assets within an appropriate risk profile.

Deferred Compensation Plan

The Company maintains a Deferred Compensation Plan in which certain employees of the Company may defer the payment and taxation of up to 75% of their base salary and up to 100% of bonus amounts and other eligible cash compensation.

This deferred compensation is invested in funds offered under this plan and is valued based on Level 1 measurements in the fair value hierarchy. Assets of the Company's deferred compensation plan are included in other current assets and recorded at fair value based on their quoted market prices. The fair value of these assets were $5.7 million and $6.1 million as of March 31, 2024 and December 31, 2023, respectively. Offsetting liabilities relating to the deferred compensation plan are included in other liabilities.

10. LEASES AND RELATED PARTY LEASES

The Company leases administrative, manufacturing, research and distribution facilities, and vehicles through operating lease agreements. The Company has no finance leases as of March 31, 2024. Many of the Company's leases include both lease (e.g., fixed payments including rent) and non-lease components (e.g., common-area or other maintenance costs). For vehicles, the Company has elected the practical expedient to group lease and non-lease components.

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

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

Total operating lease expense for the three months ended March 31, 2024 and March 31, 2023 was $6.3 million and $6.0 million, respectively, which includes $0.3 million, in related party operating lease expense.

Supplemental balance sheet information related to operating leases were as follows:

Dollars in thousands, except lease term and discount rate	March 31, 2024	December 31, 2023
ROU assets	$ 151,834	$ 156,184
Current lease liabilities	16,303	15,284
Non-current lease liabilities	170,082	166,849
Total lease liabilities	$ 186,385	$ 182,133
Weighted average remaining lease term (in years):		
Leased facilities	16.5 years	16.3 years
Leased vehicles	2.1 years	1.9 years
Weighted average discount rate:		
Leased facilities	5.7 %	5.9 %
Leased vehicles	2.7 %	2.7 %

Supplemental cash flow information related to leases for the three months ended March 31, 2024 and 2023 were as follows:

Dollars in thousands	March 31, 2024	March 31, 2023
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$ 5,734	$ 4,319
ROU assets obtained in exchange for lease liabilities:		
Operating leases	$ 746	$ 1,721

Future minimum lease payments under operating leases at March 31, 2024 were as follows:

Dollars in thousands	Related Parties	Third Parties	Total
Remainder of 2024	$ 222	$ 17,884	$ 18,106
2025	296	22,859	23,155
2026	296	20,210	20,506
2027	296	18,892	19,188
2028	296	16,603	16,899
2029	246	15,771	16,017
Thereafter	—	163,479	163,479
Total minimum lease payments	$ 1,652	$ 275,698	$ 277,350
Less: Imputed interest			90,965
Total lease liabilities			186,385
Less: Current lease liabilities			16,303
Long-term lease liabilities			170,082

There were no future minimum lease payments under finance leases at March 31, 2024.

Related Party Leases

The Company leases its manufacturing facility in Plainsboro, New Jersey, from a general partnership that is 50% owned by a principal stockholder of the Company. The term of the current lease agreement is through October 31, 2029 at an annual rate of approximately $0.3 million. The current lease agreement also provides (i) a 5-year renewal option for the Company to extend the lease from November 1, 2029 through October 31, 2034 at the fair market rental rate of the premises, and (ii) another 5-year renewal option to extend the lease from November 1, 2034 through October 31, 2039 at the fair market rental rate of the premises.

11. TREASURY STOCK

As of March 31, 2024 and December 31, 2023, there were 12.7 million and 12.8 million shares of treasury stock outstanding with a cost of $646.4 million and $647.3 million, at a weighted average cost per share of $50.76 and $50.76, respectively.

On August 15, 2023, the Company entered into a $125 million accelerated share repurchase (“August 2023 ASR”) and received 2.3 million shares of common stock at inception of the August 2023 ASR, which represented approximately 80% of the expected total shares under the August 2023 ASR. On October 18, 2023 the early exercise provision was exercised by the August 2023 ASR counterparty. The Company received an additional 0.9 million shares determined using the volume-weighted average price of the Company’s common stock during the term of the August 2023 ASR.

On January 26, 2023, the Company entered into a $150 million accelerated share repurchase ("January 2023 ASR") and received 2.1 million shares of common stock at inception of the January 2023 ASR, which represented approximately 80% of the expected total shares under the January 2023 ASR. The settlement of the January 2023 ASR agreement was completed in the second quarter of 2023, where the Company received 0.6 million shares, determined using the volume-weighted average price of the Company's common stock during the term of the January 2023 ASR.

On August 16, 2022, the Inflation Reduction Act of 2022 (the "Inflation Act") was signed into law. The Inflation Act implements a new excise tax of 1% on the net share repurchases made by the Company effective for share repurchases performed January 1, 2023, or after.

On July 18, 2023, the Board of Directors authorized a new $225 million share repurchase program, replacing the existing $225 million program authorized in April 2022, under which $75 million remained authorized at the time of its replacement. As of March 31, 2024, $100 million remained authorized. The program authorized in July 2023 allows the Company to repurchase its shares opportunistically from time to time. The Company may utilize various methods to effect any repurchases, including open market transactions, privately negotiated transactions, transactions structured through investment banking institutions, including accelerated share repurchases, or a combination of the foregoing, some of which may be effected through Rule 10b5-1 plans. The price and timing of any future purchases under the share repurchase program will depend on factors such as levels of cash generation from operations, the volume of stock option exercises by employees, cash requirements for acquisitions, dividends, economic and market conditions and stock price, and such repurchases may be discontinued at any time.

12. INCOME TAXES

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

	Three Months Ended March 31,	
	2024	2023
Reported tax rate	37.3 %	18.6 %

The Company's effective income tax rates for the three months ended March 31, 2024 and 2023 were 37.3% and 18.6%, respectively. For the three months ended March 31, 2024, the higher tax rate is attributable to a $1.5 million shortfall from stock based compensation, offset by a tax benefit for the intangible asset impairment, as compared to previous year. The Company does not have tax basis in the impaired intangible asset and has treated the tax impact as a discrete event in this quarter.

Changes to income tax laws and regulations, in any of the tax jurisdictions in which the Company operates, could impact the effective tax rate. Various governments, both U.S. and non-U.S., are increasingly focused on tax reform and revenue-raising legislation. On August 16, 2022, the Inflation Act was signed into law. The Company did not experience a material impact on the Company's effective tax rate under the Inflation Act. Further, legislation in foreign jurisdictions may be enacted, in continued response to the base erosion and profit-sharing ("BEPS") project begun by the Organization for Economic Cooperation and Development ("OECD").

The OECD released model rules related to a new 15% global minimum tax regime ("Pillar 2"). Several of the jurisdictions that the Company operates in have already adopted some form of the model rules, which could impact the amount of taxes that the Company pays after 2023. However, the rules are complex and provide for delays for implementing the tax during the early transition years, if certain conditions are met. At this time, the Company is projecting an immaterial amount related to Pillar 2 tax liability for the 2024 year. Such changes in U.S. and Non-U.S. jurisdictions could have an adverse effect on the Company's effective tax rate.

13. NET INCOME PER SHARE

Basic and diluted net income per share was as follows:

Dollars in thousands, except per share amounts	Three Months Ended March 31, 2024	2023
Basic net (loss) income per share:		
Net (loss) income	$ (3,281)	$ 24,226
Weighted average common shares outstanding	77,735	81,871
Basic net (loss) income per common share	$ (0.04)	$ 0.30
Diluted net (loss) income per share:		
Net (loss) income	$ (3,281)	$ 24,226
Weighted average common shares outstanding — Basic	77,735	81,871
Effect of dilutive securities:		
Stock options and restricted stock	—	452
Weighted average common shares for diluted earnings per share	77,735	82,323
Diluted net (loss) income per common share	$ (0.04)	$ 0.29

Basic earnings per share is computed by dividing net income by the weighted-average common shares outstanding during the period. Diluted earnings per share is computed based on the weighted-average common shares outstanding plus the effect of dilutive potential common shares outstanding during the period calculated using the treasury stock method. Dilutive potential common shares include employee equity share options, non-vested shares, and similar equity instruments granted by the Company. Potential common share equivalents have been excluded where their inclusion would be anti-dilutive.

Common stock of approximately 1.3 million and 0.3 million shares at March 31, 2024, and 2023, respectively, were not included in the computation of diluted net (loss) income per share because their effect would have been anti-dilutive.

14. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Comprehensive income for the three months ended March 31, 2024 and 2023:

Dollars in thousands	Three Months Ended March 31, 2024	2023
Net (loss) income	$ (3,281)	$ 24,226
Foreign currency translation adjustment	730	3,192
Change in unrealized loss/(gain) on derivatives, net of tax	3,735	(6,493)
Pension liability adjustment, net of tax	(5)	103
Comprehensive income, net	$ 1,179	$ 21,028

Changes in accumulated other comprehensive income by component between December 31, 2023 and March 31, 2024 are presented in the table below, net of tax:

Dollars in thousands	Gains and Losses on Derivatives	Defined Benefit Pension Items	Foreign Currency Items	Total
Balance at January 1, 2024	$ 21,489	$ 2,712	$ (39,307)	$ (15,106)
Other comprehensive gain (loss)	34,939	(5)	2,425	37,359
Less: Amounts reclassified from accumulated other comprehensive income, net	31,204	—	1,695	32,899
Net current-period other comprehensive gain (loss)	3,735	(5)	730	4,460
Balance at March 31, 2024	$ 25,224	$ 2,707	$ (38,577)	$ (10,646)

For the three months ended March 31, 2024, the Company reclassified a gain of $27.2 million and $5.7 million from accumulated other comprehensive income to other income, net and interest income, respectively.

15. SEGMENT AND GEOGRAPHIC INFORMATION

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

- The Codman Specialty Surgical segment includes (i) the Neurosurgery business, which sells a full line of products for neurosurgery and neuro critical care such as tissue ablation equipment, dural repair products, cerebral spinal fluid management devices, intracranial monitoring equipment, and cranial stabilization equipment and (ii) the Instruments business, which sells more than 40,000 instrument patterns and surgical and lighting products to hospitals, surgery centers, dental, podiatry, and veterinary offices.
- The Tissue Technologies segment includes such offerings as skin and wound repair, plastics & surgical reconstruction products, bone grafts, and nerve and tendon repair products.

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

The operating results of the various reportable segments as presented are not comparable to one another because (i) certain operating segments are more dependent than others on corporate functions for unallocated general and administrative and/or operational manufacturing functions, and (ii) the Company does not allocate certain manufacturing costs and general and administrative costs to the operating segment results. Net sales and profit by each reportable segment for the three months ended March 31, 2024 and 2023 are as follows:

	Three Months Ended March 31,	
Dollars in thousands	2024	2023
Segment Net Sales		
Codman Specialty Surgical	$ 256,434	$ 248,136
Tissue Technologies	112,438	132,710
Total revenues	$ 368,872	$ 380,846
Segment Profit		
Codman Specialty Surgical	$ 103,492	$ 110,933
Tissue Technologies	30,666	52,281
Segment profit	134,158	163,214
Amortization	(10,107)	(3,108)
Corporate and other	(120,087)	(123,724)
Operating income	$ 3,964	$ 36,382

The Company does not allocate any assets to the reportable segments. No asset information is reported to the chief operating decision maker and disclosed in the financial information for each segment. The Company attributes revenues to geographic areas based on the location of the customer. Total revenue by major geographic area consisted of the following:

	Three Months Ended March 31,	
Dollars in thousands	2024	2023
United States	$ 256,229	$ 271,002
Europe	41,596	41,064
Asia Pacific	49,545	50,473
Rest of World	21,502	18,307
Total Revenues	$ 368,872	$ 380,846

16. COMMITMENTS AND CONTINGENCIES

In consideration for certain technology, manufacturing, distribution, and selling rights and licenses granted to the Company, the Company has agreed to pay royalties on sales of certain products that it sells. The royalty payments that the Company made under these agreements were not significant for any of the periods presented.

In the ordinary course of its business, the Company is involved in, from time to time, various legal actions, including any matters described below, involving product liability, employment, intellectual property and commercial disputes, shareholder related matters, environmental proceedings, tax disputes, and governmental proceedings and investigations, some of which have been settled by the Company. In the opinion of management, such matters are either adequately covered by insurance or otherwise indemnified, or are not expected, individually or in the aggregate, to result in a material, adverse effect on the Company's financial condition. However, it is possible that the Company's results of operations, financial position and cash flows in a particular period could be materially affected by these contingencies.

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

On December 21, 2023, Fortis Advisors, LLC (representative of the security holders of ACell, Inc. ("ACell")) filed for arbitration against Integra Life Sciences claiming breach of contract related to the earnout consideration from the 2021 acquisition of ACell. Refer below for additional information on the ACell contingent considerations. The Company believes that it has strong defenses to the allegations in the arbitration and intends to defend the matter vigorously.

On September 12, 2023, a securities class action complaint, captioned *Pembroke Pines Firefighters & Police Officers Pension Fund v. Integra LifeSciences Holdings Corporation*, No. 23-cv-20321 (D.N.J.), was filed by a purported stockholder of the Company in the United States District Court for the District of New Jersey (the "Pembroke Litigation") against the Company and certain of the Company's current and former executive officers. The Pembroke Litigation, filed on behalf of a putative class of stockholders who purchased or acquired the Company's common stock between March 11, 2019 and May 22, 2023, inclusive, alleges violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder, on the basis of purportedly materially false and misleading statements and omissions relating to certain quality systems issues identified by the U.S. Food and Drug Administration at the Company's Boston, Massachusetts manufacturing facility, the Company's efforts to remediate those issues, and the Company's forecasts for certain products in its Tissue Technologies segment. The complaint seeks, among other things, compensatory damages, attorneys' fees, expert fees, and other costs. The Company believes that it has strong defenses to the allegations in the Pembroke Litigation, and intends to defend the matter vigorously.

Contingent Consideration

The Company determined the fair value of contingent consideration during the three month period ended March 31, 2024 and March 31, 2023 to reflect the change in estimate, additions, payments, transfers and the time value of money during the period.

A reconciliation of the opening balances to the closing balances of these Level 3 measurements for the three months ended March 31, 2024 and March 31, 2023 is as follows (in thousands):

	Contingent Consideration Liability Related to Acquisition of:					
Three Months Ended March 31, 2024	**Arkis**	**Location in Financial Statements**	**Derma Sciences**	**ACell**	**Surgical Innovations Associates (SIA), Inc.**	**Location in Financial Statements**
Balance as of January 1, 2024	$ 15,755		$ 2,557	$ 300	68,700	
Change in fair value of contingent consideration liabilities	(83)	Research and development	39	—	500	Selling, general and administrative
Balance as of March 31, 2024	15,672		2,596	300	69,200	
Short-Term	$ 7,562		$ —	$ —	$ 29,300	Accrued expenses and other current liabilities
Long-Term	8,110		2,596	300	39,900	Other liabilities
Total	15,672		2,596	300	69,200	

	Contingent Consideration Liability Related to Acquisition of:					
Three Months Ended March 31, 2023	**Arkis**	**Location in Financial Statements**	**Derma Sciences**	**ACell**	**Surgical Innovations Associates (SIA), Inc.**	**Location in Financial Statements**
Balance as of January 1, 2023	$ 12,895		$ 230	$ 3,700	$ 57,607	
Change in fair value of contingent consideration liabilities	3,299	Research and development	—	(2,200)	3,600	Selling, general and administrative
Balance as of March 31, 2023	$ 16,194		$ 230	$ 1,500	$ 61,207	
Short-Term	$ 4,388		$ —	$ —	$ 12,500	Accrued expenses and other current liabilities
Long-Term	11,806		230	1,500	48,707	Other liabilities
Total	16,194		230	1,500	61,207	

Arkis BioSciences Inc.

As part of the acquisition of Arkis BioSciences Inc. (“Arkis”), the Company is required to pay the former shareholders of Arkis up to $25.5 million based on the timing of certain development milestones of $10.0 million and commercial sales milestones of $15.5 million, respectively. The Company used a probability weighted income approach to calculate the fair value of the contingent consideration that considered the possible outcomes of scenarios related to each specified milestone. The Company estimated the fair value of the contingent consideration to be $13.1 million at the acquisition date.

Derma Sciences, Inc.

The Company assumed contingent consideration incurred by Derma Sciences, Inc. (“Derma Sciences”) related to its acquisitions of BioD, LLC and the intellectual property related to Medihoney® products. The Company accounted for the contingent liabilities by recording the fair value on the date of the acquisition based on a probability weighted income approach. The Company has already paid $33.3 million related to the aforementioned contingent liabilities. One contingent milestone remains which relates to net sales of Medihoney®™ products exceeding certain amounts defined in the agreement between the Company and Derma Sciences. The potential maximum undiscounted payment amounts to $3.0 million.

ACell, Inc.

As part of the acquisition of ACell, the Company is required to make payments to the former shareholders of ACell up to $100 million in total for years 2022, 2023, and 2025 based on the achievement by the Company of certain revenue-based performance milestones. The 2022 and 2023 milestones were not achieved, leaving only one contingent milestone remaining. The Company used iterations of the Monte Carlo simulation to calculate the fair value of the contingent consideration that considered the possible outcomes of scenarios related to each specific milestone. The Company estimated the fair value of the contingent consideration to be $23.9 million at the acquisition date.

Surgical Innovations Associates, Inc.

As part of the acquisition of Surgical Innovations Associates, Inc. ("SIA"), the Company is required to pay to the former shareholders of SIA up to $90.0 million for two separate payments, which are dependent on 1) achieving certain revenue-based performance milestones in 2023, 2024, and 2025 (up to $50.0 million in additional payments), as well as 2) the approval by the FDA of the PMA for DuraSorb for certain uses by certain timing targets (up to $40.0 million in additional payments). The Company used iterations of the Monte Carlo simulation to calculate the fair value of the contingent consideration for the revenue-based milestone that considered the possible outcomes of scenarios related to each specific milestone for the revenue based performance milestone. The Company used probabilities of achieving the conditions to calculate the fair value of the contingent consideration for the PMA approval milestone. The Company estimated the fair value of the contingent consideration for the revenue based milestone to be $32.6 million at the acquisition date and $25.0 million for the PMA approval milestone at the acquisition date.

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

The following discussion and analysis of the Company's financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and the related notes thereto appearing elsewhere in this Quarterly Report on Form 10-Q (this "Quarterly Report") and our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2023.

We have made statements in this Quarterly Report that constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934 (the "Exchange Act"). All statements other than statements of historical fact contained in this Quarterly Report, including, but not limited to, statements regarding our business strategy and plans, growth and growth strategies, developments in the markets for our products and services, financial results, development launches and effectiveness, research and development strategy, regulatory approvals, competitive strengths, the potential or anticipated direct or indirect impact of the Coronavirus pandemic on our business, results of operations, and/or financial condition, objectives of management for future operations and current expectations or forecasts of future results, our expectations regarding the Boston facility; restructuring and cost-saving initiatives, intellectual property rights, litigation and tax matters, governmental proceedings and investigations, mergers and acquisitions, divestitures, market acceptance of our products and services, accounting estimates, financing activities, ongoing contractual obligations, working capital adequacy, value of our investments, our effective tax rate, our expected returns to shareholders, and sales efforts, are forward-looking statements. In some cases, these forward-looking statements may be identified by forward-looking words such as "believe," "may," "might," "could," "will," "estimate," "continue," "anticipate," "intend," "seek," "plan," "expect," "should," "would" or the negative version of these words or other similar words and expressions in this Quarterly Report.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions about the Company and other matters that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. We believe these risks include but are not limited to those described under the headings "Risk Factors" and "Special Note Regarding Forward-Looking Statements" in our Annual Report on Form 10-K for the year ended December 31, 2023 and in this Quarterly Report, as such factors may be updated from time to time in our periodic filings with the Securities and Exchange Commission (the "SEC"), which are accessible on the SEC's website at https://www.sec.gov. Such risks and uncertainties include, but are not limited, to the following: the ongoing and possible future effects of global challenges, including macroeconomic uncertainties, inflation, supply chain disruptions, trade regulation and tariffs, other economic disruptions and U.S. and global recession concerns, on the Company's customers and on the Company's business, financial condition, results of operations and cash flows; the Company's ability to execute its operating plan effectively; the Company's ability to successfully integrate acquired businesses; the Company's ability to achieve sales growth in a timely fashion; the Company's ability to manufacture and ship sufficient quantities of its products to meet its customers' demands; the ability of third-party suppliers to supply us with raw materials and finished products; global macroeconomic and political conditions, including the war in Ukraine and the conflict in Israel and Gaza; the Company's ability to manage its direct sales channels effectively; the sales performance of third-party distributors on whom the Company relies to generate revenue for certain products and geographic regions; the Company's ability to access and maintain relationships with customers of acquired entities and businesses; physicians' willingness to adopt and third-party payors' willingness to provide or maintain reimbursement for the Company's recently launched, planned and existing products; initiatives launched by the Company's competitors; downward pricing pressures from customers; the Company's ability to secure regulatory approval for products in development; the Company's ability to remediate quality systems violations; fluctuations in hospitals' spending for capital equipment; the Company's ability to comply with regulations regarding products of human origin and products containing materials derived from animal source; difficulties in controlling expenses, including costs to procure and manufacture our products; the impact of changes in management or staff levels; the impact of goodwill and intangible asset impairment charges if future operating results of acquired businesses are significantly less than the results anticipated at the time of the acquisitions, the Company's ability to leverage its existing selling organizations and administrative infrastructure; the Company's ability to increase product sales and gross margins, and control non-product costs; the Company's ability to achieve anticipated growth rates, margins and scale and execute its strategy generally; the amount and timing of divestiture, acquisition and integration-related costs; the geographic distribution of where the Company generates its taxable income; new U.S. and foreign government laws and regulations, and changes in existing laws, regulations and enforcement guidance, which affect areas of our operations including, but not limited to, those affecting the health care industry, including the EU Medical Devices Regulation; the scope, duration and effect of additional U.S. and international governmental, regulatory, fiscal, monetary and public health responses to public health crises; fluctuations in foreign currency exchange rates; the amount of our bank borrowings outstanding and other factors influencing liquidity; potential negative impacts resulting from environmental, social and governance matters; and the potential impact of our compliance with governmental regulations and accounting guidance.

We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, results of operations, financial condition, and/or cash flows. These forward-looking statements speak only as of the date of this Quarterly Report and we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by applicable law. You should carefully consider forward-looking statements and understand that such forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, and involve a variety of risks and uncertainties.

GENERAL

We are a leading global medical technology company innovating treatment pathways in surgical, neurologic and regenerative care to advance patient outcomes and set new standards of surgical, neurologic and regenerative care. Founded in 1989 with the acquisition of an engineered collagen technology platform used to repair and regenerate tissue, our common stock trades on the Nasdaq Global Select Market ("Nasdaq") under the symbol "IART." We have developed numerous product lines from this technology for applications ranging from burn and deep tissue wounds to the repair of dura mater in the brain, as well as nerves and tendons. We have expanded our base regenerative technology business to include surgical instruments, neurosurgical products and advanced wound care through global acquisitions and product development to meet the evolving needs of our customers and enhance patient care.

Our products are sold in more than 120 countries through a direct sales force as well as distributors and wholesalers. We manufacture and sell medical technologies and products in two reportable business segments: Codman Specialty Surgical ("CSS") and Tissue Technologies ("TT"). The CSS segment, which represents approximately two-thirds of our total revenue, consists of market-leading technologies and instrumentation used for a wide range of specialties, such as neurosurgery, neurocritical care and otolaryngology. We are the world leader in neurosurgery and one of the top three providers in instruments used in precision, specialty, and general surgical procedures. Our TT segment generates about one-third of our overall revenue and focuses on three main areas: complex wound surgery, surgical reconstruction, and peripheral nerve repair.

We have key manufacturing and research facilities located in California, Maryland, Massachusetts, New Jersey, Ohio, Puerto Rico, Tennessee, Utah, France, Germany, Ireland and Switzerland. We source most of our handheld surgical instruments and dural sealant products through specialized third-party vendors.

Our strategies are focused around five pillars. Of these five pillars, we have identified three core growth drivers: (1) innovating for outcomes, (2) growing internationally, and (3) broadening our impact on care pathways. Our execution of the core growth drivers is enabled by two key levers: (4) driving operational and customer excellence and (5) cultivating a high-performance culture. As outlined in greater detail below, we believe these five pillars will enable us to realize and advance our integrated growth strategy.

To this end, our executive leadership team has established the following key priorities aligned to the following five pillars:

Innovating for Outcomes. An important part of Integra's growth strategy is introducing new products to strengthen and expand our portfolio, including via acquisitions. For example, On April 1, 2024, the Company successfully completed the acquisition of Acclarent from Ethicon, Inc., a subsidiary of Johnson & Johnson. Acclarent is an innovator and market leader in ear, nose and throat ("ENT") procedures and we believe that the acquisition of Acclarent will provide Integra with the opportunity to become a leading provider of ENT products and technologies. Furthermore, we believe that, owing to the ENT segment being an anatomical adjacency to neurosurgery, the acquisition will allow Integra to deliver future innovation both within the ENT segment and across our other CSS technology platforms. Additionally, we seek clinical evidence to support regulatory approval and strong reimbursement of our product portfolio around the world, including new indications for existing technologies. For example, in 2021, we filed a pre-market approval ("PMA") application for a specific indication for Surgimend® in the use of post-mastectomy breast reconstruction. In 2022, we acquired SIA, which is also pursuing a PMA for DuraSorb for use in implant-based breast reconstruction ("IBBR"), and in June 2023 we completed enrollment in the DuraSorb U.S. investigational device exemption clinical study for two-stage breast reconstruction; the primary follow-up period is one year after device implantation. We hope to have approval for DuraSorb in 2025. For SurgiMend, we are not currently able to predict an approval date because of the delays in remediating our Boston manufacturing site. We also continued to advance the development of pioneering neurosurgical technologies with the expansion of our product offerings. In 2023 we launched the CUSA® Clarity Tips for use in surgical procedures requiring the controlled fragmentation, emulsification and aspiration of bone as well as in laparoscopic liver surgery.

Growing Internationally: Over the years, we have been significantly expanding our global footprint through investments in our commercial and manufacturing organizations, the expansion and development of international markets and new product introductions. As part of our In-China-For-China strategy, we continue the build out of our assembly capabilities in our new facility in Suzhou, China. Several new products were introduced in select international markets in 2023, including MicroMatrix® and Certas Plus® Programmable Valve which were launched in Europe, and CUSA Clarity Laparoscopic tip

which was launched in Australia, New Zealand, Japan, Canada, South Africa and Israel. In addition, DuraGen Secure, received approval in Japan, while DuraGen Plus, an absorbable and sutureless collagen onlay indicated as a dura substitute for the repair of dura mater, was approved in China.

Broadening Impact on Care Pathways. We seek ways to develop products and technologies that impact the lives of patients, starting with the journey that a patient takes from diagnosis and treatment planning to surgery and postoperative care. We are well-established in acute care in the hospital setting and continue to leverage that strong position to grow in this segment and shape treatment pathways into preoperative care and additional sites of care.

Driving Operations and Customer Excellence. We have been making investments to build more responsive and scalable processes, enhance the reliability of our supply chain, and drive productivity initiatives to further supply and lower costs. Additionally, we continue to invest in technologies, systems and processes to enhance the customer experience. We continue to invest in our capacity expansion. This includes ongoing projects of transferring our Boston manufacturing to a new location in Braintree, Massachusetts, validating manufacturing processes in our manufacturing facility in Plainsboro, New Jersey and increasing cleanroom capacity in our Memphis, Tennessee location.

Cultivating a High-Performance Culture. In seeking to sustain a culture of excellence and accountability, we have focused on employee empowerment and agility and building a diverse and inclusive workplace. These efforts resulted in our being named in several best workplace lists globally in 2023. Additionally, we have been making further strides in advancing our environmental, social and governance ("ESG") agenda to drive sustainability across the organization and recently published our second annual ESG report in the third quarter of 2023. For more information on our ESG strategy, goals, performance, and achievements, please visit "Our Company—ESG Report" at https://www.integralife.com/esg-report. Information on our website is not incorporated by reference herein and is not part of this Quarterly Report.

New Product Introductions and Research and Development Updates

We continue to invest in collecting clinical evidence to support our existing products and new product launches, and to ensure that we obtain market access for broader and more cost-effective solutions.

Electromechanical Technologies and Instrumentation. The CSS business consists of a broad portfolio of market-leading brands, such as Codman®, DuraGen®, DuraSeal®, CUSA®, Mayfield®, Bactiseal®, and Certas® Plus, which are used for the management of multiple disease states, including brain tumors, traumatic brain injury, hydrocephalus and other neurological conditions. The growth in this business in recent years has been fueled by geographic expansion and new product registrations in markets, such as China, Japan, and Europe, which we expect to continue in the near-to-long term. Because our electromechanical products and instruments address significant needs in surgical procedures and limit uncertainty for surgeons, we continue to invest in registrations, clearances, and approvals for new indications and next generation improvements to our market-leading products. We have several active programs focused on life cycle management and innovation for capital and disposable products in our portfolio. Our product development efforts are focused on core clinical applications in cerebrospinal fluid ("CSF") management, neuro-critical care monitoring, minimally invasive instruments and electrosurgery and ultrasonic medical technologies, as well as our ambition to transform the standard of care in neurosurgery with product advancements in minimally invasive surgery ("MIS") and the surgical management of intracerebral hemorrhage ("ICH"). Our lighting franchise is among the most dynamic in the industry.

We are focused on the development of core clinical applications in our electromechanical technologies portfolio. We continue to update our CUSA Clarity platform by incorporating new ultrasonic handpiece and integrated electrosurgical capabilities. We have made several enhancements to our CUSA Clarity Tissue Ablation System. The extended laparoscopic tip was launched in the U.S. to enhance laparoscopic liver procedures. In addition, a single-sided bone tip received 510(k) clearance from the FDA. Commercial launch was completed successfully in early 2023. In August 2023, we launched a modified 23 kHz CUSA Electrosurgery Module ("CEM") for Clarity handpieces that can be used with additional electrosurgery generators. We continue to work with several instrument partners to bring new surgical instrument platforms to the market.

We also continued to advance the early-stage technology platforms we acquired in 2019. Through the acquisition of Arkis Biosciences, Inc. ("Arkis") we added a platform technology, CerebroFlo® external ventricular drainage ("EVD"), a catheter with Endexo® technology, a permanent additive designed to reduce the potential for catheter obstruction due to thrombus formation. The CerebroFlo EVD catheter has demonstrated an average of 99% less thrombus accumulation onto its surface, in vitro, compared to a market leading EVD catheter. Our work to combine our Bactiseal® antimicrobial technology with the Endexo anti-occlusive technology continues to progress for both a silicone-based hydrocephalus and EVD project.

We also continued to advance our innovation from the Rebound Therapeutics Corporation ("Rebound Therapeutics"), which was acquired in 2019. Rebound Therapeutics specializes in a single-use medical device, known as the Aurora Surgiscope, which is the only tubular retractor system designed for cranial surgery with an integrated access channel, camera and lighting. The 9mm Surgiscope received 510(k) clearance from the FDA in the fourth quarter of 2023.

On August 18, 2022, the Company, after consultation with the FDA and other regulatory authorities outside of the United States, initiated an immediate voluntary global product removal of all CereLink® intracranial pressure monitors. Shipments of CereLink monitors to international markets resumed in the third quarter of 2023 and shipments in the U.S. resumed in the first quarter of 2024.

Regenerative Technologies. We were the first company to receive an FDA claim for regeneration of dermal tissue and are a world leader in regenerative technology. Our regenerative technology development program applies our expertise in bioengineering to a range of biomaterials including natural materials such as purified collagen, intact human or animal tissues, honey as well as resorbable synthetic polymers with our DuraSorb and DuraSeal product lines. These unique product designs are used for neurosurgical and reconstructive surgical applications, as well as dermal regeneration, including the healing of chronic and acute wounds, tendon and nerve repair. Our regenerative technology platform includes our legacy Integra® Dermal Regeneration Template ("IDRT") products and complementary technologies that we have acquired. Our collagen manufacturing capability, combined with our history of innovation, including our launch of NeuraGen 3D, provides us with strong platform technologies for multiple indications.

In the second quarter of 2023, after consultation with the FDA, The Company initiated a voluntary global recall of all products manufactured at the Boston facility, including PriMatrix®, SurgiMend®, Revize™, and TissueMend™, distributed between March 1, 2018 and May 22, 2023.

In the third quarter of 2021, we filed a PMA application for a specific indication for Surgimend® in the use of post-mastectomy breast reconstruction. In 2022, we acquired SIA, which has also submitted a PMA application for DuraSorb with IBBR, and in June 2023 we completed enrollment in the DuraSorb U.S. IDE clinical study for two-stage breast reconstruction; the primary follow-up period is one year after device implantation. By offering two distinct product solutions, we believe we have the opportunity to build a leading position in the IBBR market. We hope to have approval for DuraSorb in 2025. For SurgiMend, we are not currently able to predict an approval date because of the delays in remediating our Boston manufacturing site.

Additionally, in 2022 we launched NeuraGen 3D Nerve Guide Matrix, a resorbable implant for repair of peripheral nerve discontinuities and engineered to create an optimized environment for nerve regeneration. Following the completion of design control activities in 2022, we launched both Cytal and MicroMatrix in Europe in 2023. In 2023, the Company received 510(k) clearance from the FDA for MicroMatrix® Flex, which is now commercially available in the U.S. as of March 2024.

As part of our ongoing efforts to remain compliant, the Company continues to work towards European Union Medical Device Regulation ("EU MDR") certifications. In 2023 the Company received EU MDR certification in the CSS segment for Hakim Programmable Valves, Certas Plus without Bactiseal catheters, and DuraSeal Dural. Additionally, the Company received EU MDR certification in the TT segment for IDRT and BioPatch in 2023, and MicroMatrix and Cytal in 2024.

FDA Matters

On March 7, 2019, TEI Biosciences, Inc. ("TEI"), one of our wholly-owned subsidiaries, received a Warning Letter (the "2019 Warning Letter"), dated March 6, 2019, from the FDA. The 2019 Warning Letter related to quality systems issues at TEI's manufacturing facility located in Boston, Massachusetts. The Boston facility manufactures extracellular bovine matrix products in our TT segment that are sold both in wound reconstruction and care and in private label channels. The letter resulted from an inspection held at that facility in October and November 2018 and did not identify any new observations that were not already provided in the Form 483 that followed the inspection. We submitted our initial response to the 2019 Warning Letter on March 28, 2019 and provide regular progress reports to the FDA as to its corrective actions. On October 28, 2021, the FDA initiated an inspection of the facility and at the conclusion of the inspection, issued an FDA Form 483 on November 12, 2021 (the "2021 Form 483"). We provided an initial response to the inspection observations. On March 1, 2023, the FDA commenced an inspection of the Boston facility, and issued an FDA Form 483 at the conclusion of this inspection (the "2023 Form 483"). In May 2023, after consultation with the FDA, the Company initiated a voluntary recall of products manufactured in the Boston facility distributed between March 1, 2018 and May 22, 2023, and extended the temporary halt of manufacturing at the facility to implement additional detection and quality controls. On July 19, 2023, TEI received a Warning Letter, dated July 17, 2023, from the FDA related to quality system issues at the Boston facility (the "2023 Warning Letter"). The 2023 Warning Letter did not identify any new observations that had not already been provided in the 2023 Form 483. The Company has submitted periodic responses to the FDA for both the 2023 Form 483 and the 2023 Warning Letter. We are committed to resolving the matters identified in the Warning Letters and Form 483s and are continuing our significant efforts to remediate the observations.

Although the Warning Letters do not restrict the Company's ability to seek FDA 510(k) clearance of products, PMAs for Class III devices to which the quality system regulation violations are reasonably related will not be approved until the violations have been addressed. We cannot give any assurances that the FDA will be satisfied with our response to the issues identified by the FDA or as to the expected date of the resolution of such issues. Until the issues cited by the FDA are resolved to the FDA's satisfaction, the FDA may initiate additional regulatory action without further notice. Any adverse regulatory

action, depending on its magnitude, may restrict us from effectively manufacturing, marketing and selling our products and could have a material adverse effect on our business, financial condition and results of operations.

As required by the 2023 Warning Letter, we retained an outside expert consultant to perform an audit of the Boston facility in March 2024. While we anticipated this audit would yield findings and there would be remaining work to be completed, the audit yielded more findings than we anticipated. We are still determining the full scope of the work required to address these additional findings and resume commercial distribution. Based on a preliminary assessment of the work to be done, we no longer expect to resume commercial distribution in 2024. As a result, the Company elected to perform impairment testing on certain definite-lived intangibles and goodwill. For further detail on the impairment testing, see *Note 5. Goodwill and Other Intangible Assets*.

We continue to work with our customers in wound reconstruction and care as we move toward commercialization. Revenues of products manufactured in the Boston facility for the year ended December 31, 2022 were approximately 5.3% of consolidated revenues.

On August 18, 2022, we, after consultation with the FDA and other regulatory authorities outside of the United States, initiated an immediate voluntary global product removal of all CereLink intracranial pressure monitors as a result of customer reports about monitors whose pressure readings were out of range. We submitted a traditional 510(k) premarket notification to the FDA on September 15, 2023 and received 510(k) clearance on February 4, 2024 from the FDA. The submission included design changes to remedy the out-of-range readings. Shipments of CereLink monitors in the U.S. resumed in the first quarter of 2024 and shipments to international markets resumed in the third quarter of 2023.

Optimization and Integration Activities

As a result of our ongoing acquisition strategy and significant growth in recent years, we have undertaken cost-saving initiatives to consolidate manufacturing operations, distribution facilities and transfer activities, eliminate duplicative positions, realign various sales and marketing activities, and expand and upgrade production capacity for our regenerative technology products. These efforts are expected to continue and while we expect a positive impact from ongoing restructuring, integration, and manufacturing transfer and expansion activities, such results remain uncertain.

RESULTS OF OPERATIONS

Executive Summary

Net loss for the three months ended March 31, 2024 was $3.3 million, or $0.04 per diluted share, as compared to net income of $24.2 million or $0.29 per diluted share for the three months ended March 31, 2023. The decrease in net income for the three months ended March 31, 2024, was driven by higher manufacturing costs and impairment charges of $7.1 million, primarily related to our Boston facility.

Special Charges

Income before taxes includes the following special charges**:**

Dollars in thousands	Three Months Ended March 31, 2024	2023
Acquisition, divestiture and integration-related charges	$ 4,723	$ 8,776
Structural optimization charges	6,505	4,335
EU medical device regulation	12,023	11,404
Boston recall expenses[(1)]	6,979	—
Total	$ 30,230	$ 24,515

[(1)] This primarily includes idle capacity charges and inventory write offs.

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

Dollars in thousands	Three Months Ended March 31, 2024	2023
Cost of goods sold	$ 13,021	$ 6,066
Research and development	5,843	4,218
Selling, general and administrative	11,411	14,730
Other income	(45)	(499)
Total	$ 30,230	$ 24,515

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

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

Revenues and Gross Margin

The Company’s revenues and gross margin on product revenues were as follows:

Dollars in thousands	Three Months Ended March 31, 2024	2023
Segment Net Sales		
Codman Specialty Surgical	$ 256,434	$ 248,136
Tissue Technologies	112,438	132,710
Total revenues	$ 368,872	380,846
Cost of goods sold	162,038	147,975
Gross margin on total revenues	$ 206,834	$ 232,871
Gross margin as a percentage of total revenues	56.1 %	61.1 %

Three Months Ended March 31, 2024 as Compared to Three Months Ended March 31, 2023

Revenues

For the three months ended March 31, 2024, total revenues decreased by $12.0 million to $368.9 million from $380.8 million for the same period in 2023. This decrease was primarily driven by the impact of the Boston recall of $15.2 million. The decrease was also inclusive of an unfavorable foreign currency impact of $2.4 million on revenues. Excluding the impacts of these items, domestic revenues decreased by $1.3 million, or 0.5% compared to the same period in the prior year. International revenues increased by $8.7 million or 8.1% as compared to the prior period. The increase in international revenues was primarily driven by increases in our APAC region, including China and Taiwan.

In the CSS segment, revenues were $256.4 million which was an increase of $8.3 million, or 3.3% as compared to the prior-year period, inclusive of a $2.4 million unfavorable foreign currency impact on revenue. Excluding the impact of foreign exchange, the Neurosurgery portfolio grew mid-single digits primarily due to increased sales in Neuro Monitoring and CSF Management.

In the TT segment, revenues were $112.4 million which was a decrease of $20.3 million, or 15.3% from the prior-year period. This decrease is primarily driven by the impact of the Boston recall of $15.2 million decline in revenue. Excluding the impact of these items, the TT segment showed a decrease in sales as compared to the same period in the prior year, primarily attributable to Integra Skin MediHoney® and MicroMatrix®

Gross Margin

Gross margin was $206.8 million for the three months ended March 31, 2024, a decrease of $26.0 million from $232.9 million for the same period in 2023. Gross margin as a percentage of revenues was 56.1% for the three months ended March 31, 2024 and 61.1% for the same period in 2023. The decrease in gross margin percentage was primarily associated with higher costs related to idle capacity at our Boston facility, as well as additional manufacturing expenses across our manufacturing sites.

Operating Expenses

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

	Three Months Ended March 31,	
	2024	**2023**
Research and development	7.3 %	7.0 %
Selling, general and administrative	44.9 %	43.8 %
Intangible asset amortization	2.7 %	0.8 %
Total operating expenses	54.9 %	51.6 %

Total operating expenses, which consist of research and development, selling, general and administrative, and amortization expenses, increased by $6.4 million, or 3.3% to $202.9 million in the three months ended March 31, 2024, compared to $196.5 million in the same period in 2023, mainly driven by intangible amortization.

Research and Development

Research and development expenses for the three months ended March 31, 2024 increased by $0.2 million as compared to the same period in the prior year.

Selling, General and Administrative

Selling, general and administrative costs for the three months ended March 31, 2024 decreased by $0.9 million as compared to the same period in the prior year.

Intangible Asset Amortization

Amortization expense (excluding amounts reported in cost of product revenues for technology-based intangible assets) for the three months ended March 31, 2024 was $10.1 million compared to $3.1 million for the same period in the prior year. The increase is driven by the impairment of customer relationship intangible related to our Boston facility.

Non-Operating Income and Expenses

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

Dollars in thousands	Three Months Ended March 31, 2024	2023
Interest income	$ 5,040	$ 4,107
Interest expense	(13,624)	(12,100)
Other income, net	(610)	1,389
Total non-operating income and expense	$ (9,194)	$ (6,604)

Interest Income

Interest income for the three months ended March 31, 2024 increased by $0.9 million as compared to the same period in the prior year primarily due to higher interest rates.

Interest Expense

Interest expense for the three months ended March 31, 2024 increased by $1.5 million as compared to the same period in the prior year primarily due incremental borrowing and higher interest rates.

Other Income, net

Other income, net for the three months ended March 31, 2024 decreased by $2.0 million compared to the same period in the prior year. The decrease is primarily driven by lower Transition Service Agreement (“TSA”) income from our divestitures.

Income Taxes

Dollars in thousands	Three Months Ended March 31, 2024	2023
Income before income taxes	$ (5,230)	$ 29,778
Income tax (benefit) expense	(1,949)	5,552
Effective tax rate	37.3 %	18.6 %

Our effective income tax rates for the three months ended March 31, 2024 and 2023 were 37.3% and 18.6%, respectively.

For the three months ended March 31, 2024, the primary drivers of the higher tax rate relates to a $1.5 million expense due to a shortfall from stock based compensation, offset by a tax benefit for the intangible asset impairment, as compared to previous year. The Company does not have tax basis in the impaired intangible asset and has treated the tax impact as a discrete event in this quarter.

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

Additionally, changes to income tax laws and regulations, in any of the tax jurisdictions in which the Company operates, could impact the effective tax rate. Various governments, both U.S. and non-U.S., are increasingly focused on tax reform and revenue-raising legislation. The current U.S. administration has proposed tax reform which, if enacted, may increase the Company’s U.S. federal income tax liability. Further, legislation in foreign jurisdictions may be enacted, in response to the base erosion and profit-shifting project begun by the Organization for Economic Cooperation and Development (“OECD”). Such changes in the U.S. and non-U.S. jurisdictions could have an adverse effect on the Company's effective tax rate.

The OECD released model rules related to a new 15% global minimum tax regime (“Pillar 2”). Several of the jurisdictions in which we operate have already adopted some form of the model rules, which could impact the amount of taxes that the Company pays during 2024 and future taxable periods. The rules are complex and provide for delays of implementing the tax during the early transition years, if certain conditions are met. At this time, the Company is projecting an immaterial amount related to Pillar 2 tax liability for the 2024 year. The Company will continue to analyze the new Pillar 2 laws and any related guidance to determine potential impacts. Such changes in U.S. and non-U.S. jurisdictions could have an adverse effect on the Company’s effective tax rate.

As discussed previously, the Company recorded a total impairment charge of $7.1 million in intangible asset amortization during the first quarter of 2024. The Company does not have tax basis in the impaired customer relationship, therefore the charge resulted in a $1.6 million reduction of the Company's deferred tax liability related to such intangible.

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

GEOGRAPHIC PRODUCT REVENUES AND OPERATIONS

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

	Three Months Ended March 31,	
Dollars in thousands	2024	2023
United States	$ 256,229	$ 271,002
Europe	41,596	41,064
Asia Pacific	49,545	50,473
Rest of World	21,502	18,307
Total Revenues	$ 368,872	$ 380,846

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

Domestic revenues decreased by $14.8 million for the three months ended March 31, 2024 compared to the same period last year. European sales increased by $0.5 million for the three months ended March 31, 2024 compared to the same period last year. Sales to customers in Asia Pacific decreased by $0.9 million for the three months ended March 31, 2024. Sales to customers in the the Rest of World for the three months ended March 31, 2024 increased by $3.2 million compared to the same period last year. The international revenues were impacted by $2.4 million of unfavorable foreign exchange impact, with the larger impact in Asia. The decrease in global revenues is primarily the result of the Boston recall which affected both domestic and international markets.

LIQUIDITY AND CAPITAL RESOURCES

Working Capital

The Company's working capital as of March 31, 2024 and December 31, 2023 was $1,113.3 million and $751.1 million, respectively. Working capital consists of total current assets less total current liabilities as presented in the consolidated balance sheets.

Cash and Marketable Securities

The Company had cash and cash equivalents totaling approximately $591.9 million and $276.4 million at March 31, 2024 and December 31, 2023 respectively, which are valued based on Level 1 measurements in the fair value hierarchy. At March 31, 2024, our non-U.S. subsidiaries held approximately $210.6 million of cash and cash equivalents that are available for use outside the U.S. The Company asserts that it has the ability and intends to indefinitely reinvest the undistributed earnings from its foreign operations unless there is no material tax cost to remit the earnings into the U.S.

Short Term Investments

The Company had short term investments, primarily consisting of time deposits, totaling approximately $71.2 million at March 31, 2024 compared to $32.7 million at December 31, 2023.

Cash Flows

Dollars in thousands	Three Months Ended March 31, 2024	2023
Net cash provided by operating activities	$ 15,756	$ 26,156
Net cash used in investing activities	(53,965)	(13,704)
Net cash provided by (used in) financing activities	358,676	(162,683)
Effect of exchange rate fluctuations on cash	(4,963)	937

Cash Flows Provided by Operating Activities

Operating cash flows for the three months ended March 31, 2024 decreased by $10.4 million compared to the same period in 2023. Within operating cash flows, net income less non-cash adjustments decreased for the three months ended March 31, 2024 by approximately $29.7 million as compared to the same period in 2023 primarily due to lower revenues attributable to the Boston recall, as well as additional manufacturing expenses across our manufacturing sites.

The changes in assets and liabilities for the three months ended March 31, 2024, net of business acquisitions, decreased cash flows by $23.4 million, mainly attributable to increases in inventory, and decreases in other current liabilities and accounts receivable.

The changes in assets and liabilities for the three months ended March 31, 2023, net of business acquisitions, decreased cash flows by $42.6 million, primarily due to increases in inventory.

Cash Flows Used in Investing Activities

Uses of cash from investing activities for the three months ended March 31, 2024 related to $38.5 million related to short term investments, and $15.5 million paid for capital expenditures to support operations improvement initiatives at a number of our manufacturing facilities and other information technology investments.

There were no sources of cash from investing activities during the three months ended March 31, 2024.

Uses of cash from investing activities during the three months ended March 31, 2023 related to $13.7 million paid for capital expenditures to support operations improvement initiatives at a number of our manufacturing facilities and other information technology investments.

There were no sources of cash from investing activities during the three months ended March 31, 2023.

Cash Flows Provided by or Used in Financing Activities

Uses of cash from financing activities in the three months ended March 31, 2024 related to the repayments of $15.1 million under our Senior Credit Facility and Securitization Facility. In addition, the Company had $3.1 million in cash taxes paid for net equity settlements.

Sources of cash from financing activities for the three months ended March 31, 2024 were $370.5 million proceeds from borrowings of long-term indebtedness and $6.4 million proceeds from the exercise of stock options.

Uses of cash from financing activities in the three months ended March 31, 2023 related to the repurchase of treasury stock of $150.0 million under the share repurchase agreements, repayments of $12.4 million under our Senior Credit Facility and Securitization Facility. In addition, we had $7.6 million attributable to debt issuance costs, as well as $5.2 million in cash taxes paid for net equity settlements.

Sources of cash from financing activities for the three months ended March 31, 2023 were $10.2 million borrowing under our Senior Credit Facility and Securitization Facility and $2.3 million proceeds from the exercise of stock options.

Amended and Restated Senior Credit Agreement, Convertible Senior Notes, Securitization and Related Hedging Activities

See *Note 6. Debt,* to the Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report) for a discussion of our Amended and Restated Senior Credit Agreement, the 2025 Notes and Securitization Facility and Note 7, *Derivative Instruments,* to the Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report) for discussion of our hedging activities.

Share Repurchase Plan

See *Note 11, Treasury Stock*, to the Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report) for further details of our share repurchase programs.

Dividend Policy

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

Capital Resources

We believe that our cash and available borrowings under the Senior Credit Facility are sufficient to finance our operations and capital expenditures for the next 12 months and foreseeable future. Our future capital requirements will depend on many factors, including the growth of our business, the timing and introduction of new products and investments, strategic plans and acquisitions, among others. Additional sources of liquidity available to us include short term borrowings and the issuance of long term debt and equity securities.

Off-Balance Sheet Arrangements

We do not have any off–balance sheet financing arrangements during the three months ended March 31, 2024 that have or are reasonably likely to have, a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to our interests.

Contractual Obligations and Commitments

We will continue to have cash requirements to support seasonal working capital needs and capital expenditures, to pay interest, to service debt, and to fund acquisitions. As part of our ongoing operations, we enter into contractual arrangements that obligate us to make future cash payments.

Our primary obligations include principal and interest payments on the revolving portion and term loan component of the Senior Credit Facility, Securitization Facility and 2025 Notes. See *Note 6. Debt,* to the Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report) for details. We also lease some of our manufacturing facilities and office buildings which have future minimum lease payments. See *Note 10. Leases and Related Party Leases*, to the Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report) for a schedule of our future minimum lease payments. Amounts related to our other obligations, including employment agreements and purchase obligations were not material.

The Company has contingent consideration obligations related to prior and current year acquisitions and future pension contribution obligations. See *Note 9. Retirement Plans*, and *Note 16. Commitments and Contingencies*, to the Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report) for details. The associated obligations are not fixed. We also have a liability for uncertain tax benefits including interest and penalties. We cannot make a reliable estimate of the period in which the uncertain tax benefits may be realized.

OTHER MATTERS

Critical Accounting Estimates

We based the discussion and analysis of our financial condition and results of operations upon our consolidated financial statements, which have been prepared in conformity with GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amount of assets and liabilities, the disclosure of contingent liabilities, and the reported amounts of revenues and expenses. The critical accounting estimates discussed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 did not materially change in the three months ended March 31, 2024.

Recently Issued Accounting Standards

Information regarding new accounting pronouncements is included in *Note 1. Basis of Presentation*, to the Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report), and is applicable to the current period's unaudited condensed consolidated financial statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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

Foreign Currency Exchange and Other Rate Risks

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

From time to time, we enter into foreign currency forward exchange contracts to manage currency exposures for transactions denominated in a currency other than an entity's functional currency. As a result, the impact of foreign currency gains/losses recognized in earnings are partially offset by gains/losses on the related foreign currency forward exchange contracts in the same reporting period. Refer to *Note 7. Derivative Instruments*, to Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report) for further information.

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

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

Interest Rate Risk

Cash and Cash Equivalents - We are exposed to the risk of interest rate fluctuations on the interest income earned on our cash and cash equivalents. A hypothetical 100 basis points movement in interest rates applicable to our cash and cash equivalents outstanding at March 31, 2024 would impact interest income by approximately $5.9 million on an annual basis. We are subject to foreign currency exchange risk with respect to cash balances maintained in foreign currencies.

Debt - Our interest rate risk relates primarily to U.S. dollar SOFR-indexed borrowings. We use interest rate swap derivative instruments to manage our earnings and cash flow exposure to changes in interest rates. These interest rate swaps fix the interest rate on a portion of our expected SOFR-indexed floating-rate borrowings. These interest rate swaps were designated as cash flow hedges as of March 31, 2024. The total notional amounts related to the Company's interest rate swaps were $1.5 billion with $775.0 million effective as of March 31, 2024. Based on our outstanding borrowings at March 31, 2024, a 100 basis points change in interest rates would have impacted interest expense on the unhedged portion of the debt by $5.1 million on an annualized basis. See *Note 7. Derivative Instruments*, to the Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report) for further information regarding interest rate swaps.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

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

As required by Exchange Act Rule 13a-15(b), we have carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of March 31, 2024. Based upon this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of March 31, 2024 to provide such reasonable assurance.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the quarter ended March 31, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Please refer to *Note 16, Commitments and Contingencies,* to the Notes to Unaudited Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report) for further details on current legal proceedings.

ITEM 1A. RISK FACTORS

There have been no material changes in our risk factors included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 and subsequent periodic reports filed with the Securities and Exchange Commission pursuant to the Exchange Act.

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

Recent Sale of Unregistered Securities:

None.

Purchase of Equity Securities

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Rule 10b5-1 Trading Plans

During the quarter ended March 31, 2024, none of the Company's directors or officers adopted or terminated any contract, instruction or written plan for the purchase or sale of Company securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or any "non-Rule 10b5-1 trading arrangement."

ITEM 6. EXHIBITS

Exhibits	
3.1(a)	Amended and Restated Certificate of Incorporation of the Company dated February 16, 1993 (Incorporated by reference to Exhibit 3.1(a) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2005)
3.1(b)	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company dated May 22, 1998 (Incorporated by reference to Exhibit 3.1(b) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1998)
3.1(c)	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company dated May 17, 1999 (Incorporated by reference to Exhibit 3.1(c) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004)
3.1(d)	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company dated December 21, 2016 (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on December 22, 2016)
3.2	Third Amended and Restated Bylaws of Integra LifeSciences Holdings Corporation, effective as of February 21, 2023 (Incorporated by reference to Exhibit 3.3 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022 filed on February 22, 2023)
10.1*	Letter Agreement, dated February 27, 2024 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 28, 2024)
10.2*+	Form of Integra LifeSciences Holdings Corporation Fifth Amended and Restated 2003 Equity Incentive Plan Non-Qualified Stock Option Award Agreement – CEO
31.1+	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2+	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1+	Certification of Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2+	Certification of Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS+#	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH+#	XBRL Taxonomy Extension Schema Document
101.CAL+#	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF+#	XBRL Definition Linkbase Document
101.LAB+#	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE+#	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Indicates a management contract or compensatory plan or arrangement.

\+ Indicates this document is filed as an exhibit herewith.

\# The financial information of Integra LifeSciences Holdings Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 2024 filed on 05/06/2024 formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Operations and Comprehensive Income, (ii) the Condensed Consolidated Balance Sheets, (iii) Parenthetical Data to the Condensed Consolidated Balance Sheets, (iv) the Condensed Consolidated Statements of Cash Flows, and (v) Notes to Condensed Consolidated Financial Statements, is furnished electronically herewith.

SIGNATURES

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION

Date: May 6, 2024

/s/ Jan De Witte
Jan De Witte
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 6, 2024

/s/ Lea Knight
Lea Knight
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

Date: May 6, 2024

/s/ Jeffrey A. Mosebrook
Jeffrey A. Mosebrook
Senior Vice President, Finance
(Principal Accounting Officer)

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
2003 EQUITY INCENTIVE PLAN
NON-QUALIFIED STOCK OPTION AGREEMENT

NON-QUALIFIED STOCK OPTION AGREEMENT (together with the attached Notice of Grant of Stock Options and Option Agreement ("Notice of Grant"), the "Option Agreement") made as of the date (the "Grant Date") set forth in Notice of Grant, between Integra LifeSciences Holdings Corporation, a Delaware corporation (the "Company"), and the named Key Employee of the Company, a Related Corporation, or an affiliate (the "Employee").

WHEREAS, the Company desires to afford the Employee an opportunity to purchase shares of common stock of the Company, par value $.01 per share ("Common Stock"), as hereinafter provided, in accordance with the provisions of the Integra LifeSciences Holdings Corporation Fifth Amended and Restated 2003 Equity Incentive Plan, as amended (the "Plan"). Requests for hardcopies of the "Plan" should be directed to Mythili Seshan at the New Jersey Corporate Office.

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth and for other good and valuable consideration the legal sufficiency of which is hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

Capitalized terms not otherwise defined below shall have the meaning set forth in the Plan. The masculine pronoun shall include the feminine and neuter, and the singular the plural, where the context so indicates.

Grant of Option. Effective , the Company hereby grants to the Employee a non-qualified stock option (the "Option") to purchase all or any part of an aggregate of the number of shares of Common Stock as set forth in the attached Notice of Grant, subject to adjustment in accordance with Section 8 of the Plan.

Purchase Price. The purchase price per share of the shares of Common Stock covered by the Option shall be that set forth in the attached Notice of Grant, subject to adjustment in accordance with Section 8 of the Plan. It is the determination of the Company's Compensation Committee (the "Committee") that on the Grant Date the per share Option exercise price was not less than the greater of one hundred percent (100%) of the fair market value of the Common Stock, or the par value thereof.

Term. Unless earlier terminated pursuant to any provision of this Option Agreement, this Option shall expire on (the "Expiration Date"). Notwithstanding anything herein to the contrary, this Option shall not be exercisable after the Expiration Date.

Exercise of Option. Twenty Five percent (25%) of the shares of Stock Options shall become vested each of the first and second, third and fourth anniversaries of the grant date. Any portion of the Option that becomes exercisable in accordance with the foregoing shall remain exercisable, subject to the provisions contained in this Option Agreement, until the expiration of the term of this Option as set forth above or until other termination of the Option as set forth in this Option Agreement.

Notwithstanding anything contained herein, no portion of the Option which has not become vested and exercisable as of the Employee's Termination of Service or in connection with Employee's Termination of Service shall thereafter become vested or exercisable.

For purposes of this Agreement, "Termination of Service" shall mean the time when the Employee ceases to provide services to the Company and its Related Corporations and Affiliates as an employee or Associate for any reason with or without Cause, including, but not by way of limitation, a termination by resignation, discharge, death, or disability. A Termination of Service shall not include a termination where the Employee is simultaneously reemployed by, or remains employed by, or continues to provide services to, the Company and/or one or more of its Related Corporations and Affiliates or a successor entity thereto.

Method of Exercising Option. Subject to the terms and conditions of this Option Agreement, the Option may be exercised in whole or in part by written notice to the Company, at its principal office, which currently is located at 1100 Campus Road, Princeton, New Jersey 08540. Such notice shall state the election to exercise the Option, and the number of shares with respect to which it is being exercised; shall be signed by the person or persons so exercising the Option; shall, unless the Company otherwise notifies the Employee, be accompanied by the investment certificate referred to below; and shall be accompanied by payment of the full Option price of such shares.

The Option price shall be paid to the Company: (i) in cash; (ii) in cash equivalent; (iii) in Common Stock of the Company, in accordance with Section 7.1(f)(ii) of the Plan (as in effect on the date of this Option Agreement); (iv) by delivering a properly executed notice of exercise of the Option, in accordance with Section 7.1(f)(iii) of the Plan (as in effect on the date of this Option Agreement); (v) in Common Stock of the Company issuable pursuant to the exercise of the Option or otherwise withheld in net settlement of the Option, in accordance with Section 7.1(f)(iv) of the Plan (as in effect on the date of this Option Agreement); or (vi) by any combination of (i)-(v).

Upon receipt of such notice and payment, the Company, as promptly as practicable, shall deliver or cause to be delivered a certificate or certificates representing the shares with respect to which the Option is so exercised. Such certificate(s) shall be registered in the name of the person or persons so exercising the Option (or, if the Option is exercised by the Employee and if the Employee so requests in the notice exercising the Option, shall be registered in the name of the Employee and the Employee's spouse,

jointly, with right of survivorship) and shall be delivered as provided above to or upon the written order of the person or persons exercising the Option. In the event the Option is exercised by any person or persons after the legal disability or death of the Employee, such notice shall be accompanied by appropriate proof of the right of such person or persons to exercise the Option. All shares that are purchased upon the exercise of the Option as provided herein shall be fully paid and not assessable by the Company.

Shares to be Purchased for Investment. Unless the Company has theretofore notified the Employee that a registration statement covering the shares to be acquired upon the exercise of the Option has become effective under the Securities Act of 1933 and the Company has not thereafter notified the Employee that such registration statement is no longer effective, it shall be a condition to any exercise of this Option that the shares acquired upon such exercise be acquired for investment and not with a view to distribution, and the person effecting such exercise shall submit to the Company a certificate of such investment intent, together with such other evidence supporting the same as the Company may request. The Company shall be entitled to delay the transferability of the shares issued upon any such exercise to the extent necessary to avoid a risk of violation of the Securities Act of 1933 (or of any rules or regulations promulgated thereunder) or of any state laws or regulations. Such restrictions may, at the option of the Company, be noted or set forth in full on the share certificates.

Non-Transferability of Option. This Option is not assignable or transferable, in whole or in part, by the Employee other than by will or by the laws of descent and distribution, and during the lifetime of the Employee the Option shall be exercisable only by the Employee or by his or her guardian or legal representative.

Termination of Service. If the Employee experiences a Termination of Service prior to the Expiration Date for any reason other than by (i) death or disability or (ii) a Qualifying Termination upon a Change in Control as further described below, this Option may be exercised, to the extent of the number of shares with respect to which the Employee could have exercised it on the date of such Termination of Service, or to any greater extent permitted by the Committee, by the Employee at any time prior to the earlier of (i) the Expiration Date or (ii) six (6) months after such Termination of Service.

Death. Notwithstanding anything contained in this Option Agreement to the contrary, if the Employee dies during his service with the Company and Related Corporations and prior to the Expiration Date, the Option shall become fully vested and exercisable and such Option upon such death can be exercised by the Employee's estate, personal representative or beneficiary who acquired the right to exercise such Option by bequest or inheritance or by reason of the Employee's death, at any time prior to the earlier of (i) the Expiration Date or (ii) one year after the date of the Employee's death.

Disability. Notwithstanding anything contained in this Option Agreement to the contrary, if the Employee incurs a disability, as defined in the Plan, during his service with the Company and Related Corporations and, prior to the Expiration Date, the Employee experiences a Termination of Service as a consequence of such disability, this

Option shall become fully vested and exercisable and such Option upon such termination due to such Disability can be exercised by the Employee, or in the event of the Employee's legal disability, by the Employee's legal representative, at any time prior to the earlier of (i) the Expiration Date or (ii) one year after the date of such termination of service due to such Disability.

Double Trigger Change in Control. Notwithstanding anything contained in this Option Agreement to the contrary, if during the Employee's service with the Company and Related Corporations and prior to the Expiration Date, a Change in Control occurs and the Employee incurs a Qualifying Termination on or within twelve (12) months following the date of such Change in Control, this Option shall become fully vested and exercisable and such Option upon such Qualifying Termination can be exercised by the Employee at any time prior to the Expiration Date.

Clawback Notwithstanding anything contained in the Plan or the Option Agreement to the contrary, the Option shall be subject to the provisions of any clawback, repayment or recapture policy implemented by the Company, including any such policy adopted to comply with applicable law (including without limitation the Dodd-Frank Wall Street Reform and Consumer Protection Act) or securities exchange listing standards and any rules or regulations promulgated thereunder, to the extent set forth in such policy and/or in any notice or agreement relating to the Option under the Plan.

Withholding of Taxes. The obligation of the Company to deliver shares of Common Stock upon the exercise of the Option shall be subject to applicable federal, state and local tax withholding requirements. If the exercise of any Option is subject to the withholding requirements of applicable federal, state or local tax laws, the Committee, in its discretion, may permit the Employee, subject to the provisions of the Plan and such additional withholding rules (the "Withholding Rules") as shall be adopted by the Committee, to satisfy the withholding tax, in whole or in part, by electing to have the Company withhold (or by returning to the Company) shares of Common Stock, which shares shall be valued, for this purpose, at their fair market value on the date of exercise of the Option (or, if later, the date on which the Employee recognizes ordinary income with respect to such exercise). An election to use shares of Common Stock to satisfy tax withholding requirements must be made in compliance with and subject to the Withholding Rules. The Committee may not withhold shares in excess of the number necessary to satisfy the minimum tax withholding requirements.

Construction. This Option Agreement is made under and subject to the provisions of the Plan as in effect on the Grant Date, and all of the provisions of the Plan as in effect on the Grant Date are hereby incorporated herein as provisions of this Option Agreement.

Governing Law. This Non-Qualified Stock Option Agreement shall be governed by applicable federal law and otherwise by the laws of the State of Delaware.

[*Remainder of Page Intentionally Blank*]

IN WITNESS WHEREOF, this Option Agreement has been executed and delivered by the parties hereto.

INTEGRA LIFESCIENCES
HOLDINGS CORPORATION

THE PARTICIPANT

By_____
Name:
Title:

_____

Exhibit 31.1

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

I, Jan De Witte, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Integra LifeSciences Holdings Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
    (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 6, 2024

/s/ Jan De Witte
Jan De Witte
President and Chief Executive Officer

Exhibit 31.2

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

I, Lea Knight, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Integra LifeSciences Holdings Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
    (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 6, 2024

/s/ Lea Knight
Lea Knight
Executive Vice President and Chief Financial Officer

Exhibit 32.1

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

In connection with the Quarterly Report of Integra LifeSciences Holdings Corporation (the "Company") on Form 10-Q for the quarter ended March 31, 2024 as filed with the Securities Exchange Commission on the date hereof (the "Report"), I, Jan De Witte, President and Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

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

Date: May 6, 2024

/s/ Jan De Witte
Jan De Witte
President and Chief Executive Officer

Exhibit 32.2

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

In connection with the Quarterly Report of Integra LifeSciences Holdings Corporation (the "Company") on Form 10-Q for the quarter ended March 31, 2024 as filed with the Securities Exchange Commission on the date hereof (the "Report"), I, Lea Knight, Executive Vice President and Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

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

Date: May 6, 2024

/s/ Lea Knight
Lea Knight
Executive Vice President and Chief Financial Officer