

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, 2018

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: 001-37599

LivaNova

LivaNova PLC

(Exact name of registrant as specified in its charter)

England and Wales

(State or other jurisdiction of
incorporation or organization)

**20 Eastbourne Terrace
London, United Kingdom**

(Address of principal executive offices)

(44) (0) 20 3325 0660

Registrant's telephone number, including area code:

98-1268150

(I.R.S. Employer
Identification No.)

W2 6LG

(Zip Code)

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

Ordinary Shares — £1.00 par value per share

Title of Each Class of Stock

The NASDAQ Stock Market LLC

Name of Each Exchange on Which Registered

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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

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

Class

Outstanding at April 26, 2018

Ordinary Shares - £1.00 par value per share

48,435,677

LIVANOVA PLC
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In this Quarterly Report on Form 10-Q, “LivaNova,” “the Company,” “we,” “us” and “our” refer to LivaNova PLC and its consolidated subsidiaries.

This report may contain references to our proprietary intellectual property, including among others:

- Trademarks for our VNS therapy systems, the VNS Therapy® System, the VITARIA® System and our proprietary pulse generator products: Model 102 (Pulse®), Model 102R (Pulse Duo®), Model 103 (Demipulse®), Model 104 (Demipulse Duo®), Model 105 (AspireHC®), Model 106 (AspireSR®) and Model 1000 (SenTiva™).
- Trademarks for our perfusion systems and products: Inspire®, Heartlink®, Connect™, XTRA®, S5® and Revolution®
- Trademarks for our line of surgical tissue and mechanical valve replacements and repair products: Mitroflow®, Crown PRT®, Solo Smart™, Perceval®, Top Hat®, Reduced Series Aortic Valves™, Carbomedics® Carbo-Seal®, Carbo-Seal Valsalva®, Carbomedics®Standard™, Orbis™ and Optiform®, Memo 3D®, Memo 3D ReChord™, AnnuloFlo®, AnnuloFlex®, Bicarbon Slimline™, Bicarbon Filtline™ and Bicarbon Overline®.

These trademarks and tradenames are the property of LivaNova or the property of our consolidated subsidiaries and are protected under applicable intellectual property laws. Solely for convenience, our trademarks and tradenames referred to in this Quarterly Report on Form 10-Q may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights to these trademarks and tradenames.

NOTE ABOUT FORWARD LOOKING STATEMENTS

Certain statements in this Quarterly Report on Form 10-Q, other than purely historical information, are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These statements include, but are not limited to, LivaNova’s plans, objectives, strategies, financial performance and outlook, trends, the amount and timing of future cash distributions, prospects or future events and involve known and unknown risks that are difficult to predict. As a result, our actual financial results, performance, achievements or prospects may differ materially from those expressed or implied by these forward-looking statements. In some cases, you can identify forward-looking statements by the use of words such as “may,” “could,” “seek,” “guidance,” “predict,” “potential,” “likely,” “believe,” “will,” “should,” “expect,” “anticipate,” “estimate,” “plan,” “intend,” “forecast,” “foresee” or variations of these terms and similar expressions, or the negative of these terms or similar expressions. Such forward-looking statements are necessarily based on estimates and assumptions that, while considered reasonable by LivaNova and its management based on their knowledge and understanding of the business and industry, are inherently uncertain. These statements are not guarantees of future performance, and stockholders should not place undue reliance on forward-looking statements. There are a number of risks, uncertainties and other important factors, many of which are beyond our control, that could cause our actual results to differ materially from the forward-looking statements contained in this Quarterly Report on Form 10-Q, and include but are not limited to the risks and uncertainties summarized below:

Risks related to our business:

- changes in our common stock price;
- changes in our profitability;
- regulatory activities and announcements, including the failure to obtain regulatory approvals for our new products;
- effectiveness of our internal controls over financial reporting;
- fluctuations in future quarterly operating results;
- failure to comply with, or changes in, laws, regulations or administrative practices affecting government regulation of our products, including, but not limited to, U.S. Food and Drug Administration (“FDA”) laws and regulations;
- failure to establish, expand or maintain market acceptance of our products for the treatment of our approved indications;
- any legislative or administrative reform to the healthcare system, including the U.S. Medicare or Medicaid systems or international reimbursement systems, that significantly reduces reimbursement for our products or procedures or denies coverage for such products or procedures or enhances coverage for competitive products or procedures, as well as adverse decisions by administrators of such systems on coverage or reimbursement issues relating to our products;
- failure to maintain the current regulatory approvals for our products’ approved indications;
- failure to obtain or maintain coverage and reimbursement for our products’ approved indications;
- unfavorable results from clinical studies;
- variations in sales and operating expenses relative to estimates;
- our dependence on certain suppliers and manufacturers to provide certain materials, components and contract services necessary for the production of our products;
- product liability, intellectual property, shareholder-related, environmental-related, income tax and other litigation, disputes, losses and costs;
- protection, expiration and validity of our intellectual property;
- changes in technology, including the development of superior or alternative technology or devices by competitors;
- competition from providers of alternative medical therapies, such as pharmaceutical companies and providers of cannabis;
- failure to comply with applicable U.S. domestic laws and regulations, including federal and state privacy and security laws and regulations;
- failure to comply with non-U.S. law and regulations;

- non-U.S. operational and economic risks and concerns;
- failure to attract or retain key personnel;
- failure of new acquisitions to further our strategic objectives or strengthen our existing businesses;
- losses or costs from pending or future lawsuits and governmental investigations;
- changes in accounting rules that adversely affect the characterization of our consolidated financial position, results of operations or cash flows;
- changes in customer spending patterns;
- continued volatility in the global market and worldwide economic conditions, including volatility caused by the implementation of Brexit;
- changes in tax laws, including changes related to Brexit, or exposure to additional income tax liabilities;
- harsh weather or natural disasters that interrupt our business operations or the business operations of our hospital-customers; and
- failure of the market to adopt new therapies or to adopt new therapies quickly.

Other factors that could cause our actual results to differ from our projected results are described in (1) “Part II, Item 1A. Risk Factors” and elsewhere in this Quarterly Report on Form 10-Q, (2) our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 (“2017 Form 10-K”), (3) our reports and registration statements filed and furnished from time to time with the Securities and Exchange Commission (“SEC”) and (4) other announcements we make from time to time.

Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof. We undertake no obligation to update or revise any forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise. You should read the following discussion and analysis in conjunction with our unaudited condensed consolidated financial statements and related notes included elsewhere in this report. Operating results for the three months ended March 31, 2018 are not necessarily indicative of future results, including the full fiscal year. You should also refer to our “Annual Consolidated Financial Statements,” “Notes” thereto, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors” contained in our 2017 Form 10-K.

Financial Information and Currency of Financial Statements

All of the financial information included in this quarterly report has been prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. The reporting currency of our condensed consolidated financial statements is U.S. dollars.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

LIVANOVA PLC AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(UNAUDITED)
(In thousands, except per share amounts)

	Three Months Ended March 31,	
	2018	2017
Net sales	\$ 250,398	\$ 226,825
Cost of sales	84,598	79,968
Product remediation	3,715	(792)
Gross profit	162,085	147,649
Operating expenses:		
Selling, general and administrative	104,161	87,340
Research and development	31,752	20,386
Merger and integration expenses	2,960	2,186
Restructuring expenses	1,881	10,030
Amortization of intangibles	8,801	7,960
Total operating expenses	149,555	127,902
Operating income from continuing operations	12,530	19,747
Interest income	447	273
Interest expense	(2,111)	(2,315)
Gain on acquisition of ImThera Medical, Inc.	11,484	—
Foreign exchange and other (losses) gains	(273)	3,173
Income from continuing operations before tax	22,077	20,878
Income tax expense	3,893	5,655
Losses from equity method investments	(362)	(1,996)
Net income from continuing operations	17,822	13,227
Net loss from discontinued operations	(4,549)	(1,956)
Net income	\$ 13,273	\$ 11,271
Basic income (loss) per share:		
Continuing operations	\$ 0.37	\$ 0.28
Discontinued operations	(0.10)	(0.05)
	\$ 0.27	\$ 0.23
Diluted income (loss) per share:		
Continuing operations	\$ 0.36	\$ 0.27
Discontinued operations	(0.09)	(0.04)
	\$ 0.27	\$ 0.23
Shares used in computing basic income (loss) per share	48,324	48,067
Shares used in computing diluted income (loss) per share	49,187	48,178

See accompanying notes to the condensed consolidated financial statements

LIVANOVA PLC AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(UNAUDITED)
(In thousands)

	Three Months Ended March 31,	
	2018	2017
Net income	\$ 13,273	\$ 11,271
Other comprehensive (loss) income:		
Net change in unrealized (loss) gains on derivatives	(1,257)	(2,633)
Tax effect	302	724
Net of tax	(955)	(1,909)
Foreign currency translation adjustment, net of tax	10,553	15,430
Total other comprehensive income	9,598	13,521
Total comprehensive income	<u>\$ 22,871</u>	<u>\$ 24,792</u>

See accompanying notes to the condensed consolidated financial statements

LIVANOVA PLC AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except share amounts)

	March 31, 2018	December 31, 2017
	(Unaudited)	
ASSETS		
<i>Current Assets:</i>		
Cash and cash equivalents	\$ 64,964	\$ 93,615
Accounts receivable, net	279,828	282,145
Inventories	154,326	144,470
Prepaid and refundable taxes	47,061	46,274
Assets held for sale	13,652	13,628
Assets of discontinued operations	257,140	250,689
Prepaid expenses and other current assets	31,100	39,037
Total Current Assets	848,071	869,858
Property, plant and equipment, net	191,701	192,359
Goodwill	875,564	784,242
Intangible assets, net	691,994	535,397
Investments	22,084	34,492
Deferred tax assets, net	68,901	11,559
Other assets	6,561	75,984
Total Assets	\$ 2,704,876	\$ 2,503,891
LIABILITIES AND STOCKHOLDERS' EQUITY		
<i>Current Liabilities:</i>		
Current debt obligations	\$ 119,708	\$ 84,034
Accounts payable	89,922	85,915
Accrued liabilities and other	81,748	78,942
Taxes payable	12,124	12,826
Accrued employee compensation and related benefits	70,980	66,224
Liabilities of discontinued operations	84,993	78,075
Total Current Liabilities	459,475	406,016
Long-term debt obligations	63,651	61,958
Deferred income taxes liability	149,700	123,342
Long-term employee compensation and related benefits	29,090	28,177
Other long-term liabilities	183,978	69,084
Total Liabilities	885,894	688,577
Commitments and contingencies (Note 11)		
<i>Stockholders' Equity:</i>		
Ordinary Shares, £1.00 par value; unlimited shares authorized; 48,627,730 shares issued and 48,428,600 shares outstanding at March 31, 2018; 48,290,276 shares issued and 48,287,346 shares outstanding at December 31, 2017	75,224	74,750
Additional paid-in capital	1,738,044	1,735,048
Accumulated other comprehensive income	54,910	45,313
Retained deficit	(48,821)	(39,664)
Treasury stock at cost, 199,130 shares at March 31, 2018 and 2,930 shares at December 31, 2017	(375)	(133)
Total Stockholders' Equity	1,818,982	1,815,314
Total Liabilities and Stockholders' Equity	\$ 2,704,876	\$ 2,503,891

See accompanying notes to the condensed consolidated financial statements

LIVANOVA PLC AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)
(In thousands)

	Three Months Ended March 31,	
	2018	2017
Operating Activities:		
Net income	\$ 13,273	\$ 11,271
Non-cash items included in net income:		
Depreciation	8,334	8,778
Amortization	8,802	11,414
Stock-based compensation	6,680	3,844
Deferred income tax benefit	(922)	(5,518)
Losses from equity method investments	1,573	3,085
Gain on acquisition of ImThera Medical, Inc.	(11,484)	—
Impairment of property, plant and equipment	458	4,650
Amortization of income taxes payable on inter-company transfers of property	1,979	6,513
Other	(1,015)	(1,915)
Changes in operating assets and liabilities:		
Accounts receivable, net	9,109	6,573
Inventories	(6,305)	(4,436)
Other current and non-current assets	(16,691)	(9,308)
Accounts payable and accrued current and non-current liabilities	5,697	4,953
Restructuring reserve	905	(6,697)
Net cash provided by operating activities	20,393	33,207
Investing Activities:		
Acquisition of ImThera Medical, Inc., net of cash acquired	(77,629)	—
Purchases of property, plant and equipment and other	(5,846)	(7,566)
Proceeds from sale of cost-method investment	—	3,192
Loans to equity-method investees	—	(5,336)
Proceeds from asset sales	123	—
Other	—	(361)
Net cash used in investing activities	(83,352)	(10,071)
Financing Activities:		
Change in short-term borrowing, net	15,503	253
Proceeds from short-term borrowing (maturities greater than 90 days)	20,000	—
Repayment of long-term debt obligations	(254)	—
Proceeds from exercise of stock options	1,607	876
Other	(4,809)	(1,819)
Net cash provided by (used in) financing activities	32,047	(690)
Effect of exchange rate changes on cash and cash equivalents	2,261	484
Net (decrease) increase in cash and cash equivalents	(28,651)	22,930
Cash and cash equivalents at beginning of period	93,615	39,789
Cash and cash equivalents at end of period	\$ 64,964	\$ 62,719

See accompanying notes to the condensed consolidated financial statements

LIVANOVA PLC AND SUBSIDIARIES
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

Note 1. Unaudited Condensed Consolidated Financial Statements

Basis of Presentation

The accompanying condensed consolidated financial statements of LivaNova as of, and for the three months ended, March 31, 2018 and March 31, 2017, have been prepared in accordance with generally accepted accounting principles in the United States of America (“U.S.” and such principles, “U.S. GAAP”) for interim financial information and the instructions to Form 10-Q and Article 10 of Regulation S-X. The accompanying condensed consolidated balance sheet of LivaNova at December 31, 2017 has been derived from audited financial statements contained in our 2017 Form 10-K, but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements. In the opinion of management, the condensed consolidated financial statements reflect all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation of the operating results of LivaNova and its subsidiaries, for the three months ended March 31, 2018 and are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. The financial information presented herein should be read in conjunction with the audited consolidated financial statements and notes thereto accompanying our 2017 Form 10-K.

Sale of our Cardiac Rhythm Management Business Franchise

On March 8, 2018 we entered into a definitive Stock and Asset Purchase Agreement (“Purchase Agreement”) with MicroPort Cardiac Rhythm B.V. and MicroPort Scientific Corporation for the sale of our Cardiac Rhythm Management (“CRM”) business franchise (the “CRM Sale”). The CRM Sale closed on April 30, 2018 for the purchase price of \$190.0 million, in addition to certain customary closing adjustments. In conjunction with the CRM Sale, we have agreed to provide certain transition services following the closing of the transaction. Prior to the closing of the CRM Sale, a regional antitrust authority in France initiated an investigation into the French cardiac rhythm management market, and a subsidiary of the CRM business operating in Clamart, France is one of the companies being investigated. The subsidiary under investigation believes it is in full compliance with all applicable laws and is, and intends to continue, cooperating with the relevant authorities. Nevertheless, the Company has agreed to provide a limited indemnity to the purchasers of the CRM business of generally up to €16.5 million relating to such investigation. We concluded that the sale of CRM represents a strategic shift in our business that will have a major effect on future operations and financial results. As a result, we classified the operating results of CRM as discontinued operations in our condensed consolidated statements of income. The assets and liabilities of CRM are presented as assets or liabilities of discontinued operations on the condensed consolidated balance sheets at March 31, 2018 and December 31, 2017.

Reclassification of Prior-Year Comparative Period Presentation

To conform the presentation in the condensed consolidated statement of cash flows for the three months ended March 31, 2017, to the presentation for the year ended December 31, 2017 in our 2017 Form 10-K, loans to cost and equity method investees of \$5.3 million was reclassified to Investing Activities from Financing Activities.

Significant Accounting Policies

Our significant accounting policies are detailed in "Note 2: Basis of Presentation, Use of Accounting Estimates and Significant Accounting Policies" of our 2017 Form 10-K.

On January 1, 2018, we adopted ASC Update (“ASU”) No 2014-09, *Revenue from Contracts with Customers*. Refer to “Note 2. Revenue Recognition.” We elected the cumulative effect transition method; however, we recognized no cumulative effect to the opening balance of retained earnings because the impact on the timing of when revenue is recognized within our Cardiac Surgery segment, specifically related to heart-lung machines and preventative maintenance contracts on cardiopulmonary equipment, was insignificant. The timing of revenue recognition for products and related revenue streams within our Neuromodulation segment and discontinued operations did not change.

Note 2. Revenue Recognition

We generate our revenue through contracts with customers that primarily consist of hospitals, healthcare institutions, distributors and other organizations. Revenue is measured based on consideration specified in a contract with a customer, and excludes amounts collected on behalf of third parties. We measure the consideration based upon the estimated amount to be received. The amount of consideration the Company ultimately receives varies depending upon the return terms, sales rebates,

discounts, and other incentives that the Company may offer, which are accounted for as variable consideration when estimating the amount of revenue to recognize. The estimate of variable consideration requires significant judgment.

We have historically experienced a low rate of product returns and the total dollar value of product returns historically have not been significant to our financial statements.

The Company recognizes revenue when it satisfies a performance obligation by transferring the control of a product or service to a customer. Some of our contracts include the purchase of products and/or services. In such cases, we allocate the transaction price based upon the relative estimated stand-alone price of each product and/or service sold. We record state and local sales taxes net; that is, we exclude sales tax from revenue. Typically, our contracts do not have a significant financing component.

The Company incurs incremental commission fees paid to its sales force associated with the sale of products. The Company applies the practical expedient within ASC 606-10-50-22 and has elected to recognize the incremental costs of obtaining a contract as an expense when incurred if the amortization period of the asset the entity would otherwise recognize is one year or less. As a result, no commissions are capitalized as contract costs at March 31, 2018.

The following is a description of the principal activities (separated by reportable segments) from which the Company generates its revenue. For more detailed information about our reportable segments including disaggregated revenue results by major product line and primary geographic markets, see "Note 15. Geographic and Segment Information".

Cardiac Surgery Products and Services

The Cardiac Surgery ("CS") segment generates its revenue from the sale of cardiopulmonary equipment and related accessories, heart valves and technical repair and maintenance services. The CS segment has two primary product lines: cardiopulmonary equipment and heart valves.

Cardiopulmonary equipment and related accessories includes oxygenators, heart-lung machines, autotransfusion systems, perfusion tubing systems, cannulae and other related accessories. Heart valves include mechanical heart valves, tissue heart valves and related repair products. Technical services include installation, repair and maintenance of CS equipment under service contracts or upon customer request.

Cardiopulmonary equipment and accessories may include performance obligations associated with assembly and installation of equipment. Accordingly, we allocate a portion of the sales prices to installation obligations and recognize that revenue when the service is provided. We recognize revenue for equipment and accessory product sales when the customer takes control of the equipment or product.

Heart valve revenue is recognized when control passes to the customer.

Technical service agreements generally provide for upfront payments in advance of rendering services or periodic billing over the contract term. Amounts billed in advance are deferred and recognized as revenue when the performance obligation is satisfied. Technical services are not a significant component of CS revenue and have been presented with the related equipment and accessories revenue.

Neuromodulation Products

Our Neuromodulation ("NM") segment generates its revenue from the sale of neuromodulation therapy systems for the treatment of drug-resistant epilepsy, treatment resistant depression and obstructive sleep apnea. The NM product line includes the VNS Therapy System, which consists of an implantable pulse generator, a lead that connects the generator to the vagus nerve, and other accessories. We recognize revenue for product sales when control passes to the customer.

Discontinued Operations: Cardiac Rhythm Management Products

CRM generates its revenue from the sale of products for the diagnosis, treatment, and management of heart rhythm disorders and heart failure. CRM devices include high-voltage defibrillators and low-voltage pacemakers. We recognize revenue for product sales when control passes to the customer.

Contract Balances

Due to the nature of our products and services, revenue producing activities may result in contract assets and contract liabilities which are insignificant to our financial position and results of operations. These activities relate primarily to CS technical services contracts for short-term and multi-year service agreements. Contract assets are primarily comprised of unbilled revenues, which occur when a performance obligation has been completed, but not billed to the customer. Contract liabilities are made up of deferred revenue, which occurs when a customer pays for a service, before a performance obligation has been completed. Contract assets are included within prepaid expenses and other current assets in the condensed

consolidated balance sheets and were insignificant at March 31, 2018 and December 31, 2017, respectively. As of March 31, 2018 and December 31, 2017, contract liabilities of \$4.2 million and \$3.8 million, respectively, are included within accrued liabilities and other and other long-term liabilities in the condensed consolidated balance sheet.

Note 3. Business Combinations

ImThera Medical, Inc. Acquisition

On January 16, 2018, we acquired the remaining 86% outstanding interests in ImThera Medical, Inc. (“ImThera”) for cash consideration of up to \$225 million. Cash consideration of \$78.3 million was paid at closing with the balance to be paid based on achievement of a certain regulatory milestone and a sales-based earnout.

Headquartered in San Diego, California, ImThera manufactures an implantable device for the treatment of obstructive sleep apnea that stimulates multiple tongue muscles via the hypoglossal nerve, which opens the airway while a patient is sleeping. ImThera has a commercial presence in the European market, and we will be advancing ImThera’s enrollment in a FDA pivotal study.

The following table presents the acquisition date fair value of the consideration transferred and the fair value of our interest in ImThera prior to the acquisition (in thousands):

Cash	\$	78,332
Contingent consideration		113,273
Fair value of our interest in ImThera prior to the acquisition ⁽¹⁾		25,580
Fair value of consideration transferred	\$	<u>217,185</u>

- (1) The fair value of our previously-held interest in ImThera was determined based on the fair value of total consideration transferred and application of a discount for lack of control. As a result, we recognized a gain of \$11.5 million for the fair value in excess of our carrying value of \$14.1 million. The gain is reflected as “Gain on acquisition of ImThera Medical, Inc.” on our condensed consolidated statement of income for the three months ended March 31, 2018.

The following table presents the preliminary purchase price allocation at fair value for the ImThera acquisition (in thousands):

In-process research and development ⁽¹⁾	\$	151,605
Developed technology ⁽¹⁾		5,661
Goodwill		87,063
Deferred income tax liabilities, net ⁽²⁾		(27,980)
Other assets and liabilities, net		836
Net assets acquired	\$	<u>217,185</u>

- (1) The amounts above are included in “Intangible assets, net” on the condensed consolidated balance sheet at March 31, 2018. Developed technology will be amortized over a remaining useful life of 20 years.
- (2) The amount includes a provisional estimate for deferred tax assets acquired and may be adjusted in future periods when we agree with positions taken in historical income tax returns.

Goodwill arising from the ImThera acquisition, which is not deductible for tax purposes, primarily represents the synergies anticipated between ImThera and our existing neuromodulation business. The assets acquired, including goodwill, are recognized in our Neuromodulation segment.

The results of the ImThera acquisition added \$0.1 million in revenue and \$1.0 million in operating losses during the three months ended March 31, 2018. Additionally, we recognized ImThera acquisition-related expenses of approximately \$0.2 million for legal and valuation expenses during the three months ended March 31, 2018. These expenses are included within “Selling, general and administrative” expenses in the condensed consolidated statement of income. Pro forma financial information assuming the ImThera acquisition had occurred as of the beginning of the calendar year prior to the year of acquisition was not material for disclosure purposes.

The ImThera business combination involved contingent consideration arrangements composed of potential cash payments upon the achievement of a certain regulatory milestone and a sales-based earnout associated with sales of products covered by the purchase agreement. The sales-based earnout was valued using projected sales from our internal strategic plans. Both arrangements are Level 3 fair value measurements and include the following significant unobservable inputs (in thousands):

ImThera Acquisition	Fair value at January 16, 2018	Valuation Technique	Unobservable Input	Ranges
Regulatory milestone-based payment	\$ 50,958	Discounted cash flow	Discount rate	4.3% - 4.7%
			Probability of payment	85% - 95%
			Projected payment years	2020 - 2021
Sales-based earnout	62,315	Monte Carlo simulation	Risk-adjusted discount rate	11.5%
			Credit risk discount rate	4.7% - 5.8%
			Revenue volatility	29.3%
			Probability of payment	85% - 95%
			Projected years of earnout	2020 - 2025
	<u>\$ 113,273</u>			

Contingent Consideration Liability

The following table provides a reconciliation of the beginning and ending balance of the contingent consideration liability (in thousands):

Balance at December 31, 2017	\$	33,973
Purchase price - ImThera contingent consideration		113,273
Payments		(196)
Changes in fair value		673
Effect of changes in foreign currency exchange rates		82
Balance at March 31, 2018 ⁽¹⁾	\$	<u>147,805</u>

(1) The contingent consideration liability represents contingent payments related to four completed acquisitions: Cellplex PTY Ltd., Inversiones Drilltex SAS, Caisson Interventional, LLC and ImThera. Refer to "Note 8. Fair Value Measurements" and "Note 17. Supplemental Financial Information."

Note 4. Discontinued Operations

On March 8, 2018 we entered into a definitive Purchase Agreement with MicroPort Cardiac Rhythm B.V. and MicroPort Scientific Corporation for the sale of our Cardiac Rhythm Management business franchise. The CRM Sale closed on April 30, 2018 for the purchase price of \$190.0 million, in addition to certain customary closing adjustments. In conjunction with the CRM Sale, we have agreed to provide certain transition services following the closing of the transaction.

CRM develops, manufactures and markets products for the diagnosis, treatment and management of heart rhythm disorders and heart failures. CRM products include high-voltage defibrillators, cardiac resynchronization therapy devices and low-voltage pacemakers. CRM has approximately 900 employees, with operations in Clamart, France; Saluggia, Italy; and Santo Domingo, Dominican Republic.

We concluded that the sale of CRM represents a strategic shift in our business that will have a major effect on future operations and financial results. As a result, we classified the operating results of CRM as discontinued operations in our condensed consolidated statements of income. The assets and liabilities of CRM are presented as assets or liabilities of discontinued operations on the condensed consolidated balance sheets at March 31, 2018 and December 31, 2017.

The following table represents assets and liabilities of CRM presented as assets and liabilities of discontinued operations on the condensed consolidated balance sheets:

	March 31, 2018	December 31, 2017
Accounts receivable, net	\$ 63,163	\$ 64,684
Inventories	55,411	54,097
Prepaid taxes	16,435	14,725
Prepaid and other assets	4,682	3,498
Property, plant and equipment, net	12,542	12,104
Deferred tax assets, net	2,200	2,517
Investments	5,328	6,098
Intangible assets, net	97,379	92,966
Assets of discontinued operations	<u>\$ 257,140</u>	<u>\$ 250,689</u>
Current debt obligations	1,305	—
Accounts payable	28,400	26,501
Accrued liabilities and other	8,646	7,669
Taxes payable	3,124	5,084
Accrued employee compensation and benefits	34,755	30,753
Deferred income taxes liability	8,763	8,068
Liabilities of discontinued operations	<u>\$ 84,993</u>	<u>\$ 78,075</u>

The following table represents the financial results of CRM presented as net loss from discontinued operations in the condensed consolidated statements of income:

	Three Months Ended March 31,	
	2018	2017
Revenues	\$ 60,107	\$ 58,280
Cost of sales	22,138	21,485
Gross profit	37,969	36,795
Selling, general and administrative expenses	31,826	25,037
Research and development	11,281	9,259
Merger and integration expenses	—	22
Restructuring expenses	651	120
Amortization of intangibles	—	3,454
Revaluation of assets and liabilities held for sale	(1,213)	—
Total operating expenses	42,545	37,892
Operating loss from discontinued operations	(4,576)	(1,097)
Foreign exchange and other gains	79	230
Loss from discontinued operations, before tax	(4,497)	(867)
Income tax benefit	(1,159)	—
Losses from equity method investments	(1,211)	(1,089)
Net loss from discontinued operations	<u>\$ (4,549)</u>	<u>\$ (1,956)</u>

Cash flows attributable to our discontinued operations are included in our condensed consolidated statements of cash flows. For the three months ended March 31, 2018 and 2017, CRM's capital expenditures were \$0.9 million and \$1.7 million and stock-based compensation expense was \$2.0 million and \$0.1 million, respectively. For the three months ended March 31, 2017 depreciation and amortization was \$3.9 million.

Note 5. Restructuring

Our 2015 and 2016 Reorganization Plans (the “Plans”) were initiated October 2015 and March 2016, respectively, in conjunction with the completion of the merger of Cyberonics and Sorin in October 2015. We initiated these plans to leverage economies of scale, streamline distribution and logistics and strengthen operational and administrative effectiveness in order to reduce overall costs. Costs associated with these plans were reported as ‘Restructuring expenses’ in our operating results in the condensed consolidated statements of income.

In March 2017, we committed to a plan to sell our Suzhou Industrial Park facility in Shanghai, China. As a result of this exit plan we recorded an impairment of the building and equipment of \$4.6 million and accrued \$0.5 million of additional costs, primarily related to employee severance, during the three months ended March 31, 2017. In addition, the remaining carrying value of the land, building and equipment was reclassified to ‘Assets held for sale’ in March 2017, with a balance of \$13.7 million as of March 31, 2018, on the condensed consolidated balance sheet. The sale of the Suzhou facility was completed in April 2018.

We estimate that these Plans will result in a net reduction of 324 personnel, of which 320 have occurred as of March 31, 2018.

The following table presents the Plans’ accruals, inventory obsolescence and other reserves, recorded in connection with the Reorganization Plans including the balances and activity related to the discontinued operations, (in thousands):

	Employee Severance and Other Termination Costs	Other	Total
Balance at December 31, 2017	\$ 3,889	\$ 2,625	\$ 6,514
Charges	2,079	453	2,532
Cash payments and adjustments	(2,542)	(460)	(3,002)
Balance at March 31, 2018	<u>\$ 3,426</u>	<u>\$ 2,618</u>	<u>\$ 6,044</u>

The following table presents restructuring expense by reportable segment, with discontinued operations included (in thousands):

	Three Months Ended March 31,	
	2018	2017
Cardiac Surgery ⁽¹⁾	\$ 1,341	\$ 6,002
Neuromodulation	6	672
Other	534	3,356
Restructuring expense from continuing operations	1,881	10,030
Discontinued operations	651	120
Total	<u>\$ 2,532</u>	<u>\$ 10,150</u>

(1) Cardiac Surgery restructuring expense for the three months ended March 31, 2017 included building and equipment impairment and additional costs of \$5.1 million related to the Suzhou, China facility exit plan.

Note 6. Product Remediation Liability

On December 29, 2015, we received an FDA Warning Letter (the “Warning Letter”) alleging certain violations of FDA regulations applicable to medical device manufacturing at our Munich, Germany and Arvada, Colorado facilities. On October 13, 2016, the Centers for Disease Control and Prevention (“CDC”) and FDA separately released safety notifications regarding the 3T Heater-Cooler devices in response to which the Company issued a Field Safety Notice Update for U.S. users of 3T Heater-Cooler devices to proactively and voluntarily contact facilities to facilitate implementation of the CDC and FDA recommendations.

At December 31, 2016, we recognized a liability for a product remediation plan related to our 3T Heater-Cooler device (“3T device”). The remediation plan we developed consists primarily of a modification of the 3T device design to include internal sealing and the addition of a vacuum system to new and existing devices. These changes are intended to address regulatory actions and to reduce further the risk of possible dispersion of aerosols from 3T devices in the operating room. We concluded that it was probable that a liability had been incurred upon management’s approval of the plan and the commitments made by

management to various regulatory authorities globally in November and December 2016, and furthermore, the cost associated with the plan was reasonably estimable. The deployment of this solution for commercially distributed devices has been dependent upon final validation and verification of the design changes and approval or clearance by regulatory authorities worldwide, including FDA clearance in the U.S. It is reasonably possible that our estimate of the remediation liability could materially change in future periods due to the various significant assumptions involved such as customer behavior, market reaction and the timing of approvals or clearance by regulatory authorities worldwide.

In April 2017, we obtained CE Mark in Europe for the design change of the 3T device and in May 2017 we completed our first vacuum and sealing upgrade on a customer-owned device. We are currently implementing the vacuum and sealing upgrade program in as many countries as possible throughout 2018 and beyond until all devices are upgraded. As part of the remediation plan, we also intend to perform a no-charge deep disinfection service (deep cleaning service) for 3T device users as we receive the required regulatory approvals. On April 12, 2018, the FDA agreed to allow us to move forward with the deep cleaning service in the U.S., adding to the growing list of countries around the world in which we offer this service. Finally, we are continuing to offer the loaner program for 3T devices, initiated in the fourth quarter of 2016, to provide existing 3T device users with a new loaner 3T device at no charge pending regulatory approval and implementation of the vacuum system addition and deep disinfection service worldwide. This loaner program began in the U.S. and is being made available progressively on a global basis, prioritizing and allocating devices to 3T device users based on pre-established criteria.

Changes in the carrying amount of the product remediation liability are as follows (in thousands):

Balance at December 31, 2017	\$	27,546
Remediation activity		(2,719)
Effect of changes in foreign currency exchange rates		754
Balance at March 31, 2018 ⁽¹⁾	\$	<u>25,581</u>

(1) At March 31, 2018, the product remediation liability balance is held within ‘Accrued liabilities and other’ and ‘Other long-term liabilities’ on the condensed consolidated balance sheet. Refer to “Note 17. Supplemental Financial Information.”

For further information, please refer to “Note 11. Commitments and Contingencies.” At this stage, we have recognized no liability with respect to any lawsuits related to the 3T device and our related legal costs are expensed as incurred.

Note 7. Investments

Cost-Method Investments

Our cost-method investments are included in ‘Investments’ in the condensed consolidated balance sheets and consist of our equity positions in the following privately-held companies (in thousands):

	March 31, 2018	December 31, 2017
Respicardia Inc. ⁽¹⁾	\$ 17,907	\$ 17,422
ImThera Medical, Inc. ⁽²⁾	—	12,900
Rainbow Medical Ltd. ⁽³⁾	1,204	1,172
MD Start II ⁽⁴⁾	1,232	1,199
	<u>\$ 20,343</u>	<u>\$ 32,693</u>

(1) Respicardia Inc. (“Respicardia”) is a privately funded U.S. company developing an implantable device designed to restore a more natural breathing pattern during sleep in patients with central sleep apnea (“CSA”) by transvenously stimulating the phrenic nerve. We have a loan outstanding to Respicardia with a carrying amount of \$0.4 million, as of March 31, 2018, which is included in ‘Prepaid expenses and other current assets’ on the condensed consolidated balance sheet.

(2) On January 16, 2018, we acquired the remaining outstanding interests in ImThera. Refer to “Note 3. Business Combinations”.

(3) Rainbow Medical Ltd. is a private Israeli venture capital company that seeds and grows companies developing medical devices in a diverse range of medical fields.

(4) MD Start II Rainbow Medical Ltd. is a private venture capital collaboration for the development of medical device technology in Europe.

Equity Method Investments

Our equity-method investments are included in 'Investments' in the condensed consolidated balance sheets and consist of our equity position in the following entities (in thousands, except for percent ownership):

	% Ownership ⁽²⁾	March 31, 2018	December 31, 2017
Highlife S.A.S. ⁽¹⁾	24.6%	\$ 1,723	\$ 1,782
Other		18	17
Total		\$ 1,741	\$ 1,799

(1) Highlife S.A.S is a privately held clinical-stage medical device company located in France and is focused on the development of a unique transcatheter mitral valve replacement system to treat patients with mitral regurgitation.

(2) Ownership percentage as of March 31, 2018.

Note 8. Fair Value Measurements

We review the fair value hierarchy classification on a quarterly basis. Changes in the ability to observe valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy. There were no transfers between Level 1, Level 2, or Level 3 during the three months ended March 31, 2018.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following table provides information by level for assets and liabilities that are measured at fair value on a recurring basis (in thousands):

	Fair Value as of March 31, 2018	Fair Value Measurements Using Inputs Considered as:		
		Level 1	Level 2	Level 3
Liabilities:				
Derivative liabilities - designated as cash flow hedges (foreign currency exchange rate "FX")	\$ 1,185	\$ —	\$ 1,185	\$ —
Derivative liabilities - designated as cash flow hedges (interest rate swaps)	1,457	—	1,457	—
Derivative liabilities - freestanding instruments (FX)	2,978	—	2,978	—
Contingent consideration ⁽¹⁾	147,805	—	—	147,805
	\$ 153,425	\$ —	\$ 5,620	\$ 147,805

	Fair Value as of December 31, 2017	Fair Value Measurements Using Inputs Considered as:		
		Level 1	Level 2	Level 3
Assets:				
Derivative assets - freestanding instruments (FX)	\$ 519	\$ —	\$ 519	\$ —
	<u>\$ 519</u>	<u>\$ —</u>	<u>\$ 519</u>	<u>\$ —</u>
Liabilities:				
Derivative liabilities - designated as cash flow hedges (FX)	\$ 460	\$ —	\$ 460	\$ —
Derivative liabilities - designated as cash flow hedges (interest rate swaps)	1,585	—	1,585	—
Contingent consideration ⁽¹⁾	33,973	—	—	33,973
	<u>\$ 36,018</u>	<u>\$ —</u>	<u>\$ 2,045</u>	<u>\$ 33,973</u>

(1) The contingent consideration liability represents contingent payments related to four completed acquisitions: Cellplex PTY Ltd., Inversiones Drilltex SAS, Caisson Interventional, LLC and ImThera.

Our recurring fair value measurements, using significant unobservable inputs (Level 3), relate solely to our contingent consideration liability. Refer to “Note 3. Business Combinations” for additional details regarding the changes in the fair value of our contingent consideration liability.

Note 9. Financing Arrangements

The outstanding principal amount of long-term debt (in thousands, except interest rates):

	March 31, 2018	December 31, 2017	Maturity	Interest Rate
European Investment Bank ⁽¹⁾	\$ 71,853	\$ 69,893	June 2021	0.09%
Mediocredito Italiano ⁽²⁾	9,390	9,118	December 2023	0.50% - 3.10%
Banca del Mezzogiorno ⁽³⁾	5,689	5,499	December 2019	0.50% - 3.15%
Bpifrance (ex-Oséo)	—	1,450	October 2019	2.58%
Region Wallonne	869	845	December 2023 and June 2033	0.00% - 2.45%
Mediocredito Italiano - mortgages and other	920	997	September 2021 and September 2026	0.80% - 1.30%
Total long-term facilities	<u>88,721</u>	<u>87,802</u>		
Less current portion of long-term debt	<u>25,070</u>	<u>25,844</u>		
Total long-term debt	<u>\$ 63,651</u>	<u>\$ 61,958</u>		

(1) The European Investment Bank (“EIB”) loan was obtained in July 2014 to support product development projects. The interest rate for the EIB loan is reset by the lender each quarter based on the Euribor. Interest payments are paid quarterly and principal payments are paid semi-annually.

(2) We obtained the Mediocredito Italiano Bank loan in July 2016 as part of the Fondo Innovazione Teconologica program implemented by the Italian Ministry of Education.

(3) The Banca del Mezzogiorno loan was obtained in January 2015 to support R&D projects as a part of the Large Strategic Project program of the Italian Ministry of Education.

Revolving Credit

The outstanding principal amount of our short-term unsecured revolving credit agreements and other agreements with various banks was \$94.6 million and \$58.2 million, at March 31, 2018 and December 31, 2017, respectively, with interest rates ranging from 0.1% to 9.3% and loan terms ranging from one day to 180 days.

Bridge Facility Agreement

In connection with the April 2018 acquisition of CardiacAssist, Inc. doing business as TandemLife (“TandemLife”), on February 14, 2018, LivaNova entered into a bridge facility agreement (the “Bridge Facility Agreement”) providing a term loan facility with the aggregate principal amount of \$170 million. The Bridge Facility Agreement will terminate on August 14, 2018, but may be extended to February 13, 2019, subject to delivery of prior notice and satisfaction of other conditions. Borrowings under the Bridge Facility Agreement will bear interest at a variable annual rate based on LIBOR plus an applicable margin. In addition, a facility fee is assessed on the commitment amount. On March 23, 2018, we amended the Bridge Facility Agreement increasing the aggregate principal amount to \$190 million.

The Bridge Facility Agreement contains financial covenants that require LivaNova to maintain a maximum semi-annual leverage ratio and a minimum semi-annual interest coverage ratio. The Bridge Facility Agreement also contains customary representations and warranties, covenants, and events of default.

On April 3, 2018, we borrowed \$190 million under the Bridge Facility Agreement to facilitate the initial payment for our acquisition of TandemLife. Refer to “Note 19. Subsequent Events” for further information regarding the TandemLife acquisition. We intend to use the proceeds from the sale of the CRM business franchise to repay the borrowings under the Bridge Facility Agreement.

Note 10. Derivatives and Risk Management

Due to the global nature of our operations, we are exposed to foreign currency exchange rate fluctuations. In addition, due to certain loans with floating interest rates, we are also subject to the impact of changes in interest rates on our interest payments. We enter into foreign currency exchange rate (“FX”) derivative contracts and interest rate swap contracts to reduce the impact of foreign currency rate and interest rate fluctuations on earnings and cash flow. We measure all outstanding derivatives each period end at fair value and report the fair value as either financial assets or liabilities in the condensed consolidated balance sheets. We do not enter into derivative contracts for speculative purposes. At inception of the contract, the derivative is designated as either a freestanding derivative or a hedge. Derivatives that are not designated as hedging instruments are referred to as freestanding derivatives with changes in fair value included in earnings.

If the derivative qualifies for hedge accounting, depending on the nature of the hedge and hedge effectiveness, changes in the fair value of the derivative will either be recognized immediately in earnings or recorded in Accumulated other comprehensive income (“AOCI”) until the hedged item is recognized in earnings upon settlement/termination. FX derivative gains and losses in AOCI are reclassified to the condensed consolidated statements of income as shown in the tables below and interest rate swap gains and losses in AOCI are reclassified to interest expense in the condensed consolidated statements of income. We evaluate hedge effectiveness at inception and on an ongoing basis. If a derivative is no longer expected to be highly effective, hedge accounting is discontinued. Hedge ineffectiveness, if any, is recorded in earnings. Cash flows from derivative contracts are reported as operating activities in the condensed consolidated statements of cash flows.

Freestanding Derivative FX Contracts

The gross notional amount of FX derivative contracts, not designated as hedging instruments, outstanding at March 31, 2018 and December 31, 2017 was \$263.1 million and \$231.9 million, respectively. These derivative contracts are designed to offset the FX effects in earnings of various intercompany loans, our EIB loan, and trade receivables. We recorded net losses for these freestanding derivatives of \$7.6 million and \$1.8 million for the three months ended March 31, 2018 and March 31, 2017, respectively. These gains and losses are included in ‘Foreign exchange and other (losses) gains’ in the condensed consolidated statements of income.

Cash Flow Hedges

Notional amounts of open derivative contracts designated as cash flow hedges (in thousands):

Description of Derivative Contract	March 31, 2018	December 31, 2017
FX derivative contracts to be exchanged for British Pounds	\$ 12,336	\$ 16,847
FX derivative contracts to be exchanged for Japanese Yen	23,890	32,302
FX derivative contracts to be exchanged for Canadian Dollars	13,465	16,494
Interest rate swap contracts	46,667	55,965
	<u>\$ 96,358</u>	<u>\$ 121,608</u>

After-tax net loss associated with derivatives designated as cash flow hedges recorded in the ending balance of AOCI and the amount expected to be reclassified to earnings in the next twelve months (in thousands):

Description of Derivative Contract	March 31, 2018	Amount Expected to be Reclassified to Earnings in Next 12 Months
FX derivative contracts	\$ (1,667)	\$ (1,667)
Interest rate swap contracts	(207)	(64)
	<u>\$ (1,874)</u>	<u>\$ (1,731)</u>

Pre-tax gains (losses) for derivative contracts designated as cash flow hedges recognized in Other Comprehensive Income (Loss) ("OCI") and the amount reclassified to earnings from AOCI (in thousands):

Description of Derivative Contract	Location in Earnings of Reclassified Gain or Loss	Three Months Ended March 31,			
		2018		2017	
		Gains Recognized in OCI	Gains Reclassified from AOCI to Earnings	Losses Recognized in OCI	(Losses) Gains Reclassified from AOCI to Earnings
FX derivative contracts	Foreign exchange and other gains (losses)	\$ 214	\$ 846	\$ (6,832)	\$ (4,678)
FX derivative contracts	SG&A	—	625	—	810
Interest rate swap contracts	Interest expense	—	—	—	(331)
		<u>\$ 214</u>	<u>\$ 1,471</u>	<u>\$ (6,832)</u>	<u>\$ (4,199)</u>

The following tables present the fair value on a gross basis, and the location of, derivative contracts reported in the condensed consolidated balance sheets (in thousands):

March 31, 2018	Liability Derivatives	
Derivatives Designated as Hedging Instruments	Balance Sheet Location	Fair Value ⁽¹⁾
Interest rate swap contracts	Accrued liabilities	\$ 796
Interest rate swap contracts	Other long-term liabilities	661
FX derivative contracts	Accrued liabilities	1,185
Total derivatives designated as hedging instruments		2,642
Derivatives Not Designated as Hedging Instruments		
FX derivative contracts	Accrued liabilities	2,978
Total derivatives not designated as hedging instruments		2,978
Total derivatives		<u>\$ 5,620</u>

December 31, 2017		Asset Derivatives		Liability Derivatives	
Derivatives Designated as Hedging Instruments	Balance Sheet Location	Fair Value ⁽¹⁾	Balance Sheet Location	Fair Value ⁽¹⁾	
Interest rate swap contracts	Prepaid expenses and other current assets	\$ —	Accrued liabilities	\$ 834	
Interest rate swap contracts	Other assets	—	Other long-term liabilities	751	
FX derivative contracts	Prepaid expenses and other current assets	—	Accrued liabilities	460	
Total derivatives designated as hedging instruments		—		2,045	
Derivatives Not Designated as Hedging Instruments					
FX derivative contracts	Prepaid expenses and other current assets	519	Accrued liabilities	—	
Total derivatives not designated as hedging instruments		519		—	
Total derivatives		<u>\$ 519</u>		<u>\$ 2,045</u>	

(1) For the classification of inputs used to evaluate the fair value of our derivatives, refer to “Note 8. Fair Value Measurements.”

Note 11. Commitments and Contingencies

FDA Warning Letter

On December 29, 2015, the FDA issued a Warning Letter alleging certain violations of FDA regulations applicable to medical device manufacturers at our Munich, Germany and Arvada, Colorado facilities.

The FDA inspected the Munich facility from August 24, 2015 to August 27, 2015 and the Arvada facility from August 24, 2015 to September 1, 2015. On August 27, 2015, the FDA issued a Form 483 identifying two observed non-conformities with certain regulatory requirements at the Munich facility. We did not receive a Form 483 in connection with the FDA’s inspection of the Arvada facility. Following the receipt of the Form 483, we provided written responses to the FDA describing corrective and preventive actions that were underway or to be taken to address the FDA’s observations at the Munich facility. The Warning Letter responded in part to our responses and identified other alleged violations related to the manufacture of our 3T device that were not previously included in the Form 483.

The Warning Letter further stated that our 3T devices and other devices we manufactured at our Munich facility are subject to refusal of admission into the U.S. until resolution of the issues set forth by the FDA in the Warning Letter. The FDA has informed us that the import alert is limited to the 3T devices, but that the agency reserves the right to expand the scope of the import alert if future circumstances warrant such action. The Warning Letter did not request that existing users cease using the 3T device, and manufacturing and shipment of all of our products other than the 3T device remain unaffected by the import limitation. To help clarify these issues for current customers, we issued an informational Customer Letter in January 2016 and that same month agreed with the FDA on a process for shipping 3T devices to existing U.S. users pursuant to a certificate of medical necessity program.

Finally, the Warning Letter stated that premarket approval applications for Class III devices to which certain Quality System regulation deviations identified in the Warning Letter are reasonably related will not be approved until the violations have been corrected; however, this restriction applies only to the Munich and Arvada facilities, which do not manufacture or design devices subject to Class III premarket approval.

We continue to work diligently to remediate the FDA’s inspectional observations for the Munich facility, as well as the additional issues identified in the Warning Letter. We take these matters seriously and intend to respond timely and fully to the FDA’s requests.

CDC and FDA Safety Communications and Company Field Safety Notice Update

On October 13, 2016, the CDC and the FDA separately released safety notifications regarding the 3T devices. The CDC's Morbidity and Mortality Weekly Report ("MMWR") and Health Advisory Notice ("HAN") reported that tests conducted by CDC and its affiliates indicate that there appears to be genetic similarity between both patient and 3T device strains of the non-tuberculous mycobacterium ("NTM") bacteria *M. chimaera* isolated in hospitals in Iowa and Pennsylvania. Citing the geographic separation between the two hospitals referenced in the investigation, the report asserts that 3T devices manufactured prior to August 18, 2014 could have been contaminated during the manufacturing process. The CDC's HAN and FDA's Safety Communication, issued contemporaneously with the MMWR report, each assess certain risks associated with 3T devices and provide guidance for providers and patients. The CDC notification states that the decision to use the 3T device during a surgical operation is to be taken by the surgeon based on a risk approach and on patient need. Both the CDC's and FDA's communications confirm that 3T devices are critical medical devices and enable doctors to perform life-saving cardiac surgery procedures.

Also on October 13, 2016, in response to the Warning Letter and CDC's HAN and FDA's Safety Communication, we issued a Field Safety Notice Update for U.S. users of 3T devices to proactively and voluntarily contact facilities to aid in implementation of the CDC and FDA recommendations. In the fourth quarter of 2016, we initiated a program to provide existing 3T device users with a new loaner 3T device at no charge pending regulatory approval and implementation of additional risk mitigation strategies worldwide. This loaner program began in the U.S. and is being made available progressively on a global basis, prioritizing and allocating devices to 3T device users based on pre-established criteria. We anticipate that this program will continue until we are able to address customer needs through a broader solution that includes implementation of one or more of the risk mitigation strategies currently under review with regulatory agencies. We are also currently implementing a vacuum and sealing upgrade program in as many countries as possible throughout 2018 and beyond until all devices are upgraded. Furthermore, we intend to perform a no-charge deep disinfection service (deep cleaning service) for 3T device users as we receive the required regulatory approvals. On April 12, 2018, the FDA agreed to allow us to move forward with the deep cleaning service in the U.S. adding to the growing list of countries around the world in which we offer this service.

On December 31, 2016, we recognized a liability for our product remediation plan related to our 3T device. We concluded that it was probable that a liability had been incurred upon management's approval of the plan and the commitments made by management to various regulatory authorities globally in November and December 2016, and furthermore, the cost associated with the plan was reasonably estimable. At March 31, 2018, the product remediation liability was \$25.6 million. Refer to "Note 6. Product Remediation Liability" for additional information.

Litigation

The Company is currently involved in litigation involving our 3T device. The litigation includes a class action complaint in the U.S. District Court for the Middle District of Pennsylvania, federal multi-district litigation in the U.S. District Court for the Middle District of Pennsylvania and cases in various state courts and jurisdictions outside the U.S. As of May 1, 2018, we are involved in approximately 115 claims worldwide, with the majority of the claims in various federal or state courts throughout the United States. The complaints generally seek damages and other relief based on theories of strict liability, negligence, breach of express and implied warranties, failure to warn, design and manufacturing defect, fraudulent and negligent misrepresentation/concealment, unjust enrichment, and violations of various state consumer protection statutes. The class action consists of all Pennsylvania residents who underwent open heart surgery at WellSpan York Hospital and Penn State Milton S. Hershey Medical Center between 2011 and 2015 and who currently are asymptomatic for NTM infection. Members of the class seek declaratory relief that the 3T devices are defective and unsafe for intended uses, medical monitoring, damages, and attorneys' fees. LivaNova has filed a petition for permission to appeal the class certification order with the U.S. Court of Appeals for the Third Circuit. We have not recognized an expense related to damages in connection with these matters because any potential loss is not currently probable or reasonably estimable. In addition, we cannot reasonably estimate a range of potential loss, if any, that may result from these matters.

Civil Investigative Demand

On May 31, 2017, the Company received a Civil Investigative Demand ("CID") from the US Attorney's Office for the Northern District of Georgia. The CID requested certain documents relating to sales and marketing of VNS devices and related products in the State of Georgia. We have not recognized an expense related to this matter because any potential loss is not currently probable or reasonably estimable. In addition we cannot reasonably estimate a range of potential loss, if any, that may result from this matter.

Other Legacy Sorin Matters

SNIA Litigation

Our subsidiary, Sorin S.p.A. (“Sorin”) was created as a result of a spin-off (the “Sorin spin-off”) from SNIA S.p.A. (“SNIA”) in January, 2004. SNIA subsequently became insolvent and the Italian Ministry of the Environment and the Protection of Land and Sea (the “Italian Ministry of the Environment”), sought compensation from SNIA in an aggregate amount of approximately \$4 billion for remediation costs relating to the environmental damage at chemical sites previously operated by SNIA’s other subsidiaries.

In September 2011 and July 2014, the Bankruptcy Court of Udine and the Bankruptcy Court of Milan held (in proceedings to which we are not parties) that the Italian Ministry of the Environment and other Italian government agencies (the “Public Administrations”) were not creditors of either SNIA or its subsidiaries in connection with their claims in the Italian insolvency proceedings. The Public Administrations appealed and in January 2016, the Court of Udine rejected the appeal. The Public Administrations have also appealed that decision.

In January 2012, SNIA filed a civil action against Sorin in the Civil Court of Milan asserting joint liability of a parent and a spun-off company. On April 1, 2016, the Court of Milan dismissed all legal actions of SNIA and of the Public Administrations further requiring the Public Administrations to pay Sorin approximately \$360,000 for legal fees. The Public Administrations appealed the 2016 Decision to the Court of Appeal of Milan. A final hearing occurred on March 21, 2018, and currently, the parties are preparing their final briefs.

We have not recognized an expense in connection with this matter because any potential loss is not currently probable or reasonably estimable. In addition, we cannot reasonably estimate a range of potential loss, if any, that may result from this matter.

Environmental Remediation Order

On July 28, 2015, Sorin received an administrative order (the “Remediation Order”) from the Italian Ministry of the Environment directing prompt commencement of environmental remediation at the chemical sites previously operated by SNIA’s other subsidiaries. We challenged the Remediation Order before the Administrative Court of Lazio in Rome (the “TAR”), and the TAR annulled the Remediation Order. The Italian Ministry of the Environment appealed. We have not recognized an expense in connection with this matter because any potential loss is not currently probable or reasonably estimable. In addition, we cannot reasonably estimate a range of potential loss, if any, that may result from this matter.

Opposition to Merger Proceedings

On July 28, 2015, the Public Administrations filed an opposition proceeding to the merger between Sorin and Cyberonics, Inc. (the “Merger”), before the Commercial Courts of Milan. The Court authorized the Merger and the Public Administrations did not appeal this decision. The proceeding then continued as a civil case, with the Public Administration seeking damages. The Commercial Court of Milan delivered a decision in October 2016, fully rejecting the Public Administration’s request and awarding us approximately \$480 thousand in damages for frivolous litigation and legal fees. The Public Administrations appealed to the Court of Appeal of Milan.

Tax Litigation

In a tax audit report received October 30, 2009, the Regional Internal Revenue Office of Lombardy (the “Internal Revenue Office”) informed Sorin Group Italia S.r.l. that, among several issues, it was disallowing in part (for a total of €102.6 million (approximately \$126.4 million), related to tax years 2002 through 2006) a tax-deductible write down of the investment in the U.S. company, Cobe Cardiovascular Inc., which Sorin Group Italia S.r.l. recognized in 2002 and deducted in five equal installments, beginning in 2002. In December 2009, the Internal Revenue Office issued notices of assessment for 2002, 2003 and 2004. The assessments for 2002 and 2003 were automatically voided for lack of merit. In December 2010 and October 2011, the Internal Revenue Office issued notices of assessment for 2005 and 2006, respectively. We challenged all three notices of assessment (for 2004, 2005 and 2006) before the relevant Provincial Tax Courts.

The preliminary challenges filed for 2004, 2005 and 2006 were denied at the first jurisdictional level. We appealed these decisions. The appeal submitted against the first-level decision for 2004 was successful. The Internal Revenue Office appealed this second-level decision to the Italian Supreme Court (Corte di Cassazione) on February 3, 2017. The Italian Supreme Court’s decision is pending.

The appeals submitted against the first-level decisions for 2005 and 2006 were rejected. We appealed these adverse decisions to the Italian Supreme Court, where the matters are still pending.

In November 2012, the Internal Revenue Office served a notice of assessment for 2007, and in July 2013, served a notice of assessment for 2008. In these matters the Internal Revenue Office claims an increase in taxable income due to a reduction (similar to the previous notices of assessment for 2004, 2005 and 2006) of the losses reported by Sorin Group Italia S.r.l. for the 2002, 2003 and 2004 tax periods, and subsequently utilized in 2007 and 2008. We challenged both notices of assessment. The Provincial Tax Court of Milan has stayed its decision for years 2007 and 2008 pending resolution of the litigation regarding years 2004, 2005, and 2006. The total amount of losses in dispute is €62.6 million (approximately \$77.2 million). We have continuously reassessed our potential exposure in these matters, taking into account the recent, and generally adverse, trend to Italian taxpayers in this type of litigation. Although we believe that our defensive arguments are strong, noting the adverse trend in some of the court decisions, we have recognized a reserve for an uncertain tax position of €17.0 million (approximately \$20.9 million).

Other Matters

Additionally, we are the subject of various pending or threatened legal actions and proceedings that arise in the ordinary course of our business. These matters are subject to many uncertainties and outcomes that are not predictable and that may not be known for extended periods of time. Since the outcome of these matters cannot be predicted with certainty, the costs associated with them could have a material adverse effect on our consolidated net income, financial position or liquidity.

Note 12. Stockholders' Equity

Comprehensive income

The table below presents the change in each component of AOCI, net of tax, and the reclassifications out of AOCI into net earnings for the three months ended March 31, 2018 and March 31, 2017 (in thousands):

	Change in Unrealized Gain (Loss) on Derivatives	Foreign Currency Translation Adjustments Gain (Loss) ⁽¹⁾	Total
As of December 31, 2017	\$ (919)	\$ 46,232	\$ 45,313
Other comprehensive income before reclassifications, before tax	214	10,552	10,766
Tax expense	(51)	—	(51)
Other comprehensive income before reclassifications, net of tax	163	10,552	10,715
Reclassification of gain from accumulated other comprehensive income, before tax	(1,471)	—	(1,471)
Reclassification of tax expense	353	—	353
Reclassification of gain from accumulated other comprehensive income, after tax	(1,118)	—	(1,118)
Net current-period other comprehensive (loss) income, net of tax	(955)	10,552	9,597
As of March 31, 2018	\$ (1,874)	\$ 56,784	\$ 54,910
As of December 31, 2016	\$ 3,619	\$ (72,106)	\$ (68,487)
Other comprehensive (loss) income before reclassifications, before tax	(6,832)	15,430	8,598
Tax benefit	1,934	—	1,934
Other comprehensive (loss) income before reclassifications, net of tax	(4,898)	15,430	10,532
Reclassification of loss from accumulated other comprehensive income, before tax	4,199	—	4,199
Reclassification of tax benefit	(1,210)	—	(1,210)
Reclassification of loss from accumulated other comprehensive income, after tax	2,989	—	2,989
Net current-period other comprehensive (loss) income, net of tax	(1,909)	15,430	13,521
As of March 31, 2017	\$ 1,710	\$ (56,676)	\$ (54,966)

- (1) Taxes are not provided for foreign currency translation adjustments as translation adjustments are related to earnings that are intended to be reinvested in the countries where earned.

Note 13. Stock-Based Incentive Plans

Stock-based incentive plans compensation expense (in thousands):

	Three Months Ended March 31,	
	2018	2017
Service-based stock appreciation rights ("SARs")	\$ 1,348	\$ 1,571
Service-based restricted stock units ("RSUs")	2,156	2,170
Market performance-based restricted stock units	345	—
Operating performance-based restricted stock units	848	30
Total stock-based compensation expense	<u>\$ 4,697</u>	<u>\$ 3,771</u>

During the three months ended March 31, 2018, we executed stock-based compensatory award agreements with contract terms agreed upon by us and the respective individuals, as approved by the Compensation Committee of our Board of Directors. Awards with service conditions vest ratably over four years subject to forfeiture unless service conditions are met. Market performance-based awards cliff vest after three years subject to the rank of the Company's total shareholder return for the three-year period ending December 31, 2020 relative to the total shareholder return of a peer group of companies. Operating performance-based awards cliff vest after three years subject to the achievement of certain thresholds of cumulative adjusted free cash flow for the three year period ending 2020. Compensation expense related to award agreements executed during 2018 for the three months ended March 31, 2018 was \$0.5 million.

Stock-based compensation agreements executed during the three months ended March 31, 2018, representing potential shares and their weighted average grant date fair values by type follows (shares in thousands, fair value in dollars):

	Three Months Ended March 31, 2018	
	Shares	Weighted Average Grant Date Fair Value
Service-based SARs	561	\$ 27.19
Service-based RSUs	178	\$ 88.38
Market performance-based RSUs	41	\$ 99.97
Operating performance-based RSUs	41	\$ 88.38

Note 14. Income Taxes

During the three months ended March 31, 2018 and March 31, 2017, we recorded income tax expense from continuing operations of \$3.9 million and \$5.7 million, respectively, with a consolidated effective income tax rate of 17.6% and 27.1%, respectively.

Our consolidated effective income tax rate for the three months ended March 31, 2017 was impacted by various discrete tax items, including the recognition of a \$3.0 million deferred tax asset related to a reserve for an uncertain tax position recognized in a prior year.

Compared with the three months ended March 31, 2017, the lower effective tax rate for the three months ended March 31, 2018 was primarily attributable to the impact of the U.S. tax reform and certain law changes in the UK that occurred in the three months ended December 31, 2017.

Note 15. Net Income (Loss) Per Share

The following table sets forth the computation of basic and diluted net income (loss) per share (in thousands, except per share data):

	Three Months Ended March 31,	
	2018	2017
Numerator:		
Net income from continuing operations	\$ 17,822	\$ 13,227
Net loss from discontinued operations	(4,549)	(1,956)
Net income	<u>\$ 13,273</u>	<u>\$ 11,271</u>
Denominator:		
Basic weighted average shares outstanding	48,324	48,067
Add effects of share-based compensation instruments ⁽¹⁾	863	111
Diluted weighted average shares outstanding	<u>49,187</u>	<u>48,178</u>
Basic income (loss) per share:		
Continuing operations	\$ 0.37	\$ 0.28
Discontinued operations	(0.10)	(0.05)
	<u>\$ 0.27</u>	<u>\$ 0.23</u>
Diluted income (loss) per share:		
Continuing operations	\$ 0.36	\$ 0.27
Discontinued operations	(0.09)	(0.04)
	<u>\$ 0.27</u>	<u>\$ 0.23</u>

(1) Excluded from the computation of diluted earnings per share were a total of 836 thousand and 607 thousand stock options, SARs and restricted shares units outstanding as of March 31, 2018, and March 31, 2017, respectively, because to include them would have been anti-dilutive.

Note 16. Geographic and Segment Information

We identify operating segments based on the way we manage, evaluate and internally report our business activities for purposes of allocating resources and assessing performance. We have two reportable segments: Cardiac Surgery and Neuromodulation.

The Cardiac Surgery segment generates its revenue from the development, production and sale of cardiovascular surgery products. Cardiac Surgery products include oxygenators, heart-lung machines, autotransfusion systems, mechanical heart valves and tissue heart valves.

The Neuromodulation segment generates its revenue from the design, development and marketing of neuromodulation therapy for the treatment of drug-resistant epilepsy and treatment resistant depression. Neuromodulation products include the VNS Therapy System, which consists of an implantable pulse generator, a lead that connects the generator to the vagus nerve, surgical equipment to assist with the implant procedure, equipment to enable the treating physician to set the pulse generator stimulation parameters for the patient, instruction manuals and magnets to suspend or induce stimulation manually. On January 16, 2018, we acquired the remaining 86% outstanding interests in ImThera which is also included in our Neuromodulation segment. ImThera manufactures an implantable device for the treatment of obstructive sleep apnea that stimulates multiple tongue muscles via the hypoglossal nerve, which opens the airway while a patient is sleeping.

“Other” includes corporate shared service expenses for finance, legal, human resources and information technology and corporate business development (“New Ventures”). New Ventures is focused on new growth platforms and identification of other opportunities for expansion.

During the three months ended March 31, 2018, we began to include the results of heart failure within the Neuromodulation segment for internal reporting purposes in order to manage and evaluate business activities for purposes of allocating resources

and assessing performance. Previously, the results of heart failure were reported within Other. Segment results for the three months ended March 31, 2017 have been restated to conform to the current period presentation.

Net sales of our reportable segments include revenues from the sale of products they each develop and manufacture or distribute. We define segment income as operating income before merger and integration, restructuring and amortization of intangibles.

We operate under three geographic regions: United States, Europe, and Rest of world.

The table below presents net sales by operating segment and geographic region (in thousands):

	Three Months Ended March 31,	
	2018	2017
Cardiopulmonary		
United States	\$ 38,445	\$ 32,176
Europe	36,870	30,609
Rest of world	49,815	44,513
	<u>125,130</u>	<u>107,298</u>
Heart Valves		
United States	6,536	6,069
Europe	12,116	10,347
Rest of world	12,390	15,490
	<u>31,042</u>	<u>31,906</u>
Cardiac Surgery		
United States	44,981	38,245
Europe	48,986	40,956
Rest of world	62,205	60,003
	<u>156,172</u>	<u>139,204</u>
Neuromodulation		
United States	77,992	73,659
Europe	10,291	7,929
Rest of world	5,561	5,571
	<u>93,844</u>	<u>87,159</u>
Other		
	<u>382</u>	<u>462</u>
Totals		
United States	122,973	111,904
Europe ⁽¹⁾⁽²⁾	59,277	48,885
Rest of world	68,148	66,036
Total ⁽³⁾	<u>\$ 250,398</u>	<u>\$ 226,825</u>

(1) Net sales to external customers includes \$8.2 million and \$6.8 million in the United Kingdom, our country of domicile, for the three months ended March 31, 2018 and March 31, 2017, respectively.

(2) Europe sales include those countries in which we have a direct sales presence, whereas European countries in which we sell through distributors are included in Rest of world.

(3) No single customer represented over 10% of our consolidated net sales and no country's net sales exceeded 10% of our consolidated sales except for the U.S.

Operating income by segment is as follows (in thousands):

Operating Income from Continuing Operations	Three Months Ended March 31,	
	2018	2017
Cardiac Surgery	\$ 10,258	\$ 16,033
Neuromodulation	38,734	40,756
Other	(22,820)	(16,866)
Total reportable segment income from continuing operations	26,172	39,923
Merger and integration expenses	2,960	2,186
Restructuring expenses	1,881	10,030
Amortization of intangibles	8,801	7,960
Operating income from continuing operations	\$ 12,530	\$ 19,747

Assets by reportable segment (in thousands):

Assets	March 31, 2018	December 31, 2017
Cardiac Surgery	\$ 1,386,282	\$ 1,386,032
Neuromodulation	715,611	532,894
Other	345,843	334,276
Discontinued operations	257,140	250,689
Total assets	\$ 2,704,876	\$ 2,503,891

Capital expenditures by segment (in thousands):

Capital expenditures	Three Months Ended March 31,	
	2018	2017
Cardiac Surgery	\$ 3,131	\$ 3,794
Neuromodulation	347	1,461
Other	1,443	1,203
Discontinued operations	925	1,658
Total	\$ 5,846	\$ 8,116

The changes in the carrying amount of goodwill by reportable segment for the three months ended March 31, 2018 were as follows (in thousands):

	Neuromodulation	Cardiac Surgery	Other	Total
December 31, 2017	\$ 315,943	\$ 425,882	\$ 42,417	\$ 784,242
Goodwill as a result of acquisition ⁽¹⁾	87,063	—	—	87,063
Foreign currency adjustments	—	4,259	—	4,259
March 31, 2018	\$ 403,006	\$ 430,141	\$ 42,417	\$ 875,564

(1) Goodwill recognized as a result of the ImThera acquisition. Refer to "Note 3. Business Combinations."

Property, plant and equipment, net by geography are as follows (in thousands):

PP&E	March 31, 2018	December 31, 2017
United States	\$ 60,684	\$ 62,154
Europe	119,630	119,133
Rest of world	11,387	11,072
Total	<u>\$ 191,701</u>	<u>\$ 192,359</u>

Note 17. Supplemental Financial Information

Accounts receivable, net, consisted of the following (in thousands):

	March 31, 2018	December 31, 2017
Trade receivables from third parties	\$ 286,321	\$ 288,127
Allowance for bad debt	(6,493)	(5,982)
	<u>\$ 279,828</u>	<u>\$ 282,145</u>

Our customers consist of hospitals, other healthcare institutions, distributors, organized purchase groups and government and private entities. Actual collection periods for trade receivables vary significantly as a function of the nature of the customer (e.g., government or private) and its geographic location.

Inventories consisted of the following (in thousands):

	March 31, 2018	December 31, 2017
Raw materials	\$ 36,331	\$ 39,810
Work-in-process	23,197	18,206
Finished goods	94,798	86,454
	<u>\$ 154,326</u>	<u>\$ 144,470</u>

Inventories are reported net of the provision for obsolescence. The provision, which reflects normal obsolescence and includes components that are phased out or expired, totaled \$11.9 million and \$10.5 million at March 31, 2018 and December 31, 2017, respectively.

Prepaid expenses and other current assets consisted of the following (in thousands):

	March 31, 2018	December 31, 2017
Prepaid expenses	\$ 18,056	\$ 13,904
Deposits and advances to suppliers	5,746	4,551
Earthquake grant receivable	4,177	4,064
Escrow deposit - Caisson	2,000	2,000
Current loans and notes receivable	1,121	1,395
Income taxes payable on inter-company transfers of property ⁽¹⁾	—	12,604
Derivative contract assets	—	519
	<u>\$ 31,100</u>	<u>\$ 39,037</u>

- (1) The income taxes payable on intercompany transfers of property was an asset created to defer the income tax effect of an intercompany intellectual property sale pursuant to ASC 810-10-45-8. Pursuant to ASU 2016-16 - Income Taxes - Intra-Entity Transfers of Assets Other than Inventory, we reclassified the balance at December 31, 2017 to retained earnings on January 1, 2018.

Other assets consisted of the following (in thousands):

	March 31, 2018	December 31, 2017
Investments ⁽¹⁾	\$ 3,699	\$ 2,943
Escrow deposit - Caisson	1,000	1,000
Guaranteed deposits	700	725
Loans and notes receivable	—	1,276
Income taxes payable on inter-company transfers of property ⁽²⁾	—	68,127
Other	1,162	1,913
	<u>\$ 6,561</u>	<u>\$ 75,984</u>

(1) Primarily cash surrender value of company owned life insurance policies.

(2) The income taxes payable on intercompany transfers of property was an asset created to defer the income tax effect of an intercompany intellectual property sale pursuant to ASC 810-10-45-8. Pursuant to ASU 2016-16 - Income Taxes - Intra-Entity Transfers of Assets Other than Inventory, we reclassified the balance at December 31, 2017 to retained earnings on January 1, 2018.

Accrued liabilities and other consisted of the following (in thousands):

	March 31, 2018	December 31, 2017
Product remediation ⁽¹⁾	\$ 14,549	\$ 16,811
Deferred consideration - acquisitions	14,374	14,300
Provisions for agents, returns and other	8,638	8,134
Legal and administrative costs	6,801	6,082
Derivative contract liabilities ⁽²⁾	4,959	1,294
Restructuring related liabilities	5,594	3,560
Royalty costs	2,167	3,615
Contract liabilities	2,879	2,900
Uncertain tax positions	—	2,536
Escrow indemnity liabilities - Caisson	2,000	2,000
Product warranty obligations	1,142	1,476
Government grants	—	1,174
Research and development costs	2,257	797
Other accrued expenses	16,388	14,263
	<u>\$ 81,748</u>	<u>\$ 78,942</u>

(1) Refer to "Note 6. Product Remediation Liability".

(2) Refer to "Note 10. Derivatives and Risk Management".

Other long-term liabilities consisted of the following (in thousands):

	March 31, 2018	December 31, 2017
Contingent consideration ⁽¹⁾	\$ 147,805	\$ 33,973
Product remediation liability ⁽²⁾	11,032	10,735
Uncertain tax positions ⁽³⁾	19,018	18,306
Escrow indemnity liabilities - Caisson	1,000	1,000
Contract liabilities	1,334	918
Financial derivatives ⁽⁴⁾	661	751
Restructuring related liabilities	450	—
Unfavorable operating leases	242	252
Other	2,436	3,149
	<u>\$ 183,978</u>	<u>\$ 69,084</u>

- (1) The contingent consideration liability represents contingent payments related to four completed acquisitions: Cellplex PTY Ltd., Inversiones Drilltex SAS, Caisson Interventional, LLC and ImThera. Refer to “Note 3. Business Combinations.”
- (2) Refer to “Note 6. Product Remediation Liability.”
- (3) Uncertain tax positions include accrued interest and penalties.
- (4) Refer to “Note 10. Derivatives and Risk Management.”

Note 18. New Accounting Pronouncements

In January 2016, the FASB issued ASU No. 2016-01, Financial Instruments-Overall (Subtopic 825-10): *Recognition and Measurement of Financial Assets and Financial Liabilities*. Update 2016-01 requires equity investments that do not result in consolidation and are not accounted for under the equity method to be measured at fair value with changes recognized in net income. However, an entity may elect to measure equity investments that do not have readily determinable fair values at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. We made this election beginning January 1, 2018, resulting in no material impact to our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*. This guidance requires lessees to recognize most leases on their balance sheets as lease liabilities with corresponding right-of-use assets. The new standard requires lessees and lessors to classify most leases using a principle generally consistent with that of “IAS 17 - Leases,” which is similar to U.S. GAAP but without the use of bright lines. The standard also changes what is considered initial direct costs. Entities are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the consolidated financial statements. The standard is effective for annual periods beginning after December 15, 2018 and interim periods within that year. We are currently evaluating the effect this standard will have on our consolidated financial statements and related disclosures.

In June 2016, the FASB issued ASC Update No. 2016-13, *Financial Instruments—Credit Losses* (Topic 326): The amendments in this update require a financial asset (or a group of financial assets) measured at amortized cost basis to be presented at the net amount expected to be collected. The amendments in this update are effective for annual periods beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted as of the fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The modified-retrospective approach is generally applicable through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. We are currently evaluating the effect this standard will have on our consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU No. 2016-15, *Classification of Certain Cash Receipts and Cash Payments* (Topic 230 -Statement of Cash Flows). Update 2016-15 provides guidance on the presentation and classification of certain cash receipts and cash payments in the statement of cash flows. We adopted this update on January 1, 2018 resulting in no material impact to our consolidated statements of cash flows.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes - Intra-Entity Transfers of Assets Other Than Inventory* (Topic 740). This update simplifies the accounting for the income tax consequences of transfers of assets from one unit of a corporation to another unit or subsidiary by eliminating an accounting exception that prevents the recognition of current and deferred income tax consequences for such “intra-entity transfers” until the assets have been sold to an outside party.

We adopted this update on January 1, 2018 and recognized the following balance sheet adjustments (in thousands):

	Balance at December 31, 2017		Adjustment due to ASU No. 2016-16		Balance at January 1, 2018
Assets					
Prepaid expenses and other current assets	\$ 39,037	\$	(12,604)	\$	26,433
Deferred tax assets, net	11,559		58,301		69,860
Other assets	75,984		(68,127)		7,857
Equity					
Retained deficit	\$ (39,664)	\$	(22,430)	\$	(62,094)

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles-Goodwill and Other - Simplifying the Test for Goodwill Impairment* (Topic 350). This update removes step 2 of the goodwill impairment test that compares the implied fair value of goodwill with its carrying amount. Instead, an impairment test is performed by comparing the fair value of a reporting unit with its carrying amount. An impairment charge will be recorded by the amount a reporting unit's carrying amount exceeds its fair value. The update is effective for annual periods after December 15, 2019, including interim periods within those annual reporting periods with early adoption permitted.

In March 2017, the FASB issued ASU No. 2017-01, *Business Combinations - Clarifying the Definition of a Business* (Topic 805). This update clarifies when a set of assets and activities is a business. We adopted this update on January 1, 2018. The ImThera acquisition was considered an acquisition of a business. Refer to "Note 3. Business Combinations" for a discussion of our acquisition of ImThera.

In March 2017, the FASB issued ASU No. 2017-07, *Compensation—Retirement Benefits* (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post Retirement Benefit Cost. This update requires that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. We adopted this update on January 1, 2018, resulting in an immaterial impact to our consolidated financial statement. The condensed consolidated statement of income for the three months ended March 31, 2017 has been restated for the adoption of this update.

Note 19. Subsequent Events

TandemLife Acquisition

On April 4, 2018, we acquired TandemLife for cash consideration of up to \$250 million. Upfront costs were approximately \$200 million with up to \$50 million in contingent consideration based on achieving regulatory milestones. TandemLife is a privately-held Delaware corporation focused on advanced cardiopulmonary temporary support solutions. On April 3, 2018, we borrowed \$190 million under the Bridge Facility Agreement to facilitate the initial payment for our acquisition of TandemLife. We intend to use the proceeds from the sale of the CRM business franchise to repay the borrowings under the Bridge Facility Agreement. The initial accounting and fair valuation for the TandemLife business combination is not complete as of the date of filing this Quarterly Report on Form 10-Q.

Revolving Credit

On April 10, 2018, we entered into an amendment and restatement agreement with Barclays Bank PLC amending the revolving facility agreement originally dated October 21, 2016 (the "Amendment"). The Amendment increases the borrowing capacity under the facility from \$40.0 million to \$70.0 million and extends the term of the facility one year, terminating October 20, 2019. Borrowings under the facility bear interest at a rate of LIBOR plus 0.85%.

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

The following discussion and analysis should be read in conjunction with our condensed consolidated financial statements and related notes which appear elsewhere in this document and with our 2017 Form 10-K. Our discussion and analysis may contain forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth under "Risk Factors" in Item 1A of our 2017 Form 10-K and elsewhere in this quarterly report.

The capitalized terms used below have been defined in the notes to our condensed consolidated financial statements. In the following text, the terms "LivaNova," "the Company," "we," "us" and "our" refer to LivaNova PLC and its consolidated subsidiaries.

Business Overview

We are a public limited company organized under the laws of England and Wales, headquartered in London, United Kingdom. We are a global medical device company focused on the development and delivery of important therapeutic solutions for the benefit of patients, healthcare professionals and healthcare systems throughout the world. Working closely with medical professionals in the fields of Cardiac Surgery and Neuromodulation, we design, develop, manufacture and sell innovative therapeutic solutions that are consistent with our mission to improve our patients' quality of life, increase the skills and capabilities of healthcare professionals and minimize healthcare costs.

Sale of the CRM Business Franchise

On March 8, 2018 we entered into a definitive Purchase Agreement with MicroPort Cardiac Rhythm B.V. and MicroPort Scientific Corporation for the sale of our CRM business franchise. The CRM Sale closed on April 30, 2018 for the purchase price of \$190.0 million, in addition to certain customary closing adjustments. In conjunction with the CRM Sale, we have agreed to provide certain transition services following the closing of the transaction. Prior to the closing of the CRM Sale, a regional antitrust authority in France initiated an investigation into the French cardiac rhythm management market, and a subsidiary of the CRM business operating in Clamart, France is one of the companies being investigated. The subsidiary under investigation believes it is in full compliance with all applicable laws and is, and intends to continue, cooperating with the relevant authorities. Nevertheless, the Company has agreed to provide a limited indemnity to the purchasers of the CRM business of generally up to €16.5 million relating to such investigation.

The results of operations of CRM are reflected as discontinued operations for all periods presented in this Quarterly Report on Form 10-Q. Refer to the Discontinued Operations discussion below and to "Note 4. Discontinued Operations" to the Financial Statements in this Quarterly Report on Form 10-Q.

Business Franchises

LivaNova is comprised of two principal Business Franchises: Cardiac Surgery and Neuromodulation, corresponding to our main therapeutic areas. Corporate activities include corporate business development ("New Ventures"). New Ventures is focused on new growth platforms and identification of other opportunities for expansion.

For further information regarding our business segments, historical financial information and our methodology for the presentation of financial results, please refer to the condensed consolidated financial statements and accompanying notes of this Quarterly Report on Form 10-Q.

Cardiac Surgery Update

Our Cardiac Surgery Business Franchise is engaged in the development, production and sale of cardiac surgery products, including oxygenators, heart-lung machines, perfusion tubing systems, cannulae and other accessories used for extracorporeal circulation, systems for autologous blood transfusion and blood washing, as well as a complete line of surgical tissue heart valve and mechanical heart valve replacements and repair products.

In March 2017, we committed to a plan to sell our Suzhou Industrial Park facility in Shanghai, China, an emerging market greenfield project for the local manufacture of Cardiopulmonary disposable products in Suzhou Industrial Park in China. The land, building and equipment were recorded as Assets held for sale on the condensed consolidated balance sheet, with a carrying value of \$13.7 million as of March 31, 2018. The sale of the Suzhou facility was completed in April 2018.

FDA Warning Letter

On December 29, 2015, the FDA issued a Warning Letter alleging certain violations of FDA regulations applicable to medical device manufacturers at our Munich, Germany and Arvada, Colorado facilities. Among other things, the Warning Letter stated that our 3T devices and other devices we manufactured at our Munich facility are subject to refusal of admission

into the U.S. until resolution of the issues set forth by the FDA in the Warning Letter. The FDA has informed us that the import alert is limited to the 3T devices, but that the agency reserves the right to expand the scope of the import alert if future circumstances warrant such action. The Warning Letter did not request that existing users cease using the 3T device, and manufacturing and shipment of all of our products other than the 3T device remain unaffected by the import limitation. To help clarify these issues for current customers, we issued an informational Customer Letter in January 2016, and that same month agreed with the FDA on a process for shipping 3T devices to existing U.S. users pursuant to a certificate of medical necessity program. We continue to work diligently to remediate the FDA's inspectional observations for the Munich facility, as well as the additional issues identified in the Warning Letter. For further information, please refer to "Note 11. Commitments and Contingencies" in our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

CDC and FDA Safety Communications and Company Field Safety Notice Update

On October 13, 2016 the CDC and the FDA separately released safety notifications regarding the 3T devices. The CDC's MMWR and HAN reported that tests conducted by CDC and its affiliates indicate that there appears to be genetic similarity between both patient and 3T device strains of the NTM bacteria *M. chimaera* isolated in hospitals in Iowa and Pennsylvania. Citing the geographic separation between the two hospitals referenced in the investigation, the report asserts that 3T devices manufactured prior to August 18, 2014 could have been contaminated during the manufacturing process. The CDC's HAN and FDA's Safety Communication, issued contemporaneously with the MMWR report, each assess certain risks associated with 3T devices and provide guidance for providers and patients. On October 13, 2016, we issued a Field Safety Notice Update for U.S. users of 3T devices to proactively and voluntarily contact facilities to aid in implementation of the CDC and FDA recommendations. For further information, please refer to "Note 11. Commitments and Contingencies" in our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

Product Remediation Plan

In response to the Warning Letter and CDC's HAN and FDA's Safety Communication, in the fourth quarter of 2016, we initiated a program to provide existing 3T device users with a new loaner 3T device at no charge pending regulatory approval and implementation of additional risk mitigation strategies worldwide. This loaner program began in the U.S. and is being made available progressively on a global basis, prioritizing and allocating devices to 3T device users based on pre-established criteria. We anticipate that this program will continue until we are able to address customer needs through a broader solution that includes implementation of one or more of the risk mitigation strategies currently under review with regulatory agencies. We are also currently implementing a vacuum and sealing upgrade program in as many countries as possible throughout 2018 and beyond until all devices are upgraded. Furthermore, we intend to perform a no-charge deep disinfection service (deep cleaning service) for 3T device users. On April 12, 2018, the FDA agreed to allow us to move forward with the deep cleaning service in the U.S., adding to the growing list of countries around the world in which we offer the service.

At March 31, 2018, the product remediation liability was \$25.6 million. For further information, please refer to "Note 6. Product Remediation Liability" in our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

Heart Valves

In January 2018, we announced that we had started enrollment in BELIEVE. This study focuses on the overall incidence of reduced leaflet motion identified by CT imaging in patients receiving a LivaNova aortic heart valve. We are planning to enroll approximately 230 patients at 15 sites in the U.S. and Canada.

In March 2018, we announced that we had started enrollment in PERFECT, a Perceval valve clinical study in China. The study is being conducted to demonstrate the safety and effectiveness of Perceval in the Chinese population. We plan to enroll approximately 160 patients at 8 investigational sites.

Neuromodulation Update

The Neuromodulation segment designs, develops and markets neuromodulation therapy for the treatment of drug-resistant epilepsy, treatment resistant depression and heart failure. Through this segment, we market our proprietary implantable VNS Therapy® Systems that deliver vagus nerve stimulation therapy for the treatment of epilepsy and depression.

Our product development efforts are directed toward improving the VNS Therapy System and developing new products that provide additional features and functionality. We are conducting ongoing product development activities to enhance the VNS Therapy System pulse generator, lead and programming software. We support studies for our product development efforts and to build clinical evidence for the VNS Therapy System. We will be required to obtain appropriate U.S. and international regulatory approvals, and clinical studies may be a prerequisite to regulatory approvals for some products. Our research and development (“R&D”) efforts will require significant funding to complete and may not be successful. Even if successful, additional clinical studies may be needed to achieve regulatory approval and to commercialize any or all new or improved products.

Epilepsy

In April 2018, we obtained CE Mark for our SenTiva VNS Therapy System, which follows FDA approval in the U.S. by the FDA in October 2017. The SenTiva VNS Therapy System consists of the SenTiva implantable generator and the next-generation VNS Therapy Programming System. SenTiva is the smallest and lightest responsive therapy for epilepsy. The new VNS Therapy Programming System features a wireless wand and new user interface on a small tablet. Together, these components offer patients with drug-resistant epilepsy a physician-directed, customizable therapy with smart technology that reduces the number of seizures, lessens the duration of seizures and enables a faster recovery.

In March 2018, we announced the launch and enrollment of the first patient in a clinical study to examine the use of our VNS Therapy System using Microburst technology. This feasibility study will determine the initial safety and effectiveness of delivering VNS Therapy using high frequency bursts of stimulation in patients who have drug-resistant epilepsy. The study consists of two cohorts, enrolling up to 40 patients at approximately 15 sites in the U.S.

Depression

In March 2017, the American Journal of Psychiatry published the results of the longest and largest naturalistic study on effective treatments for patients experiencing chronic and severe depression. The findings showed that the addition of VNS Therapy to traditional treatment methods is effective in reducing symptoms in patients with treatment-resistant depression.

In January 2018 we announced the launch and enrollment of the first patient in our Global RESTORE-LIFE Study, which evaluates the use of our VNS Therapy System in patients who have Treatment-Resistant Depression and failed to achieve an adequate response to standard psychiatric management. Our plan is to enroll a minimum of 500 patients who will be implanted at up to 80 sites outside of the U.S. We are currently enrolling patients in Germany and will expand to other European countries during the year.

Heart Failure

We are focused on the development and clinical testing of the VITARIA® System for treating heart failure through vagus nerve stimulation.

We received CE Mark approval of the VITARIA System in February 2015 for patients who have moderate to severe heart failure (New York Heart Association Class II/III) with left ventricular dysfunction (ejection fraction <40%) and who remain symptomatic despite stable, optimal heart failure drug therapy. The VITARIA System provides a specific method of VNS called autonomic regulation therapy (“ART”), and it includes the same elements as the VNS Therapy System. We conducted a pilot study, ANTHEM-HF, outside the United States, which concluded in 2014. The study results support the safety and efficacy of ART delivered by the VITARIA System. The VITARIA System is not approved in the U.S. During 2014, we also initiated a second pilot study, ANTHEM-HFpEF, to study ART in patients experiencing symptomatic heart failure with preserved ejection fraction. This pilot study is currently underway outside the United States.

Obstructive Sleep Apnea

We have invested in ImThera, a privately held, emerging-growth company developing an implantable neurostimulation device system for the treatment of obstructive sleep apnea (“OSA”) since 2011. On January 16, 2018, we acquired the remaining 86% outstanding interests in ImThera for up to approximately \$225 million. Up-front costs are approximately \$78 million with the balance paid on a schedule driven by regulatory and sales milestones. Headquartered in San Diego, California, ImThera manufactures an implantable device that stimulates multiple tongue muscles via the hypoglossal nerve, which opens the airway while a patient is sleeping. The ImThera device is highly aligned with our Neuromodulation Business Franchise. ImThera has a commercial presence in the European market, while we will be advancing ImThera’s enrollment in an FDA pivotal study. We expect to submit pivotal trial results to the FDA towards the end of 2019 or in early 2020.

Corporate Activities and New Ventures

Corporate activities include shared services for finance, legal, human resources and information technology and New Ventures. New Ventures is focused on new growth platforms and identification of other opportunities for expansion.

Mitral Valve Regurgitation

Mitral regurgitation (“MR”) occurs when the heart’s mitral valve does not close tightly, which allows blood to flow backwards in the heart. This reduces the amount of blood that flows to the rest of the body, making the patient feel tired or out of breath. Treatment depends on the nature and the severity of MR. In certain cases, heart surgery may be needed to repair or replace the valve. Left untreated, severe mitral valve regurgitation can cause heart failure or heart rhythm problems (arrhythmias).

In May 2017, we acquired the remaining 51% outstanding equity interest in Caisson Interventional LLC (“Caisson”) in support of our strategic growth initiatives. We are focused on the design, development and clinical evaluation of a novel transcatheter mitral valve replacement (“TMVR”) implant device with a fully transvenous delivery system for the treatment of mitral regurgitation. In April 2016, Caisson obtained FDA approval of an Investigational Device Exemption study using its technology for treating mitral regurgitation heart failure with transcatheter mitral valve replacement and we are currently executing against a defined clinical data development plan designed to enable commercialization of the Caisson technology.

We are also invested in two mitral valve startups. Cardiosolutions Inc. (“Cardiosolutions”) and Highlife S.A.S. (“Highlife”). Cardiosolutions, a startup headquartered in the U.S. in which we have held an interest since 2012, is developing an innovative spacer technology for treating mitral regurgitation. Highlife, headquartered in France, is focused on developing devices for treating mitral regurgitation through percutaneous replacement of the native mitral valve.

Significant Accounting Policies and Critical Accounting Estimates

In addition to our critical accounting policies provided in “Part II, Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in our 2017 Form 10-K, refer to “Note 2. Revenue Recognition” included in this Quarterly Report on Form 10-Q.

The accompanying unaudited condensed consolidated financial statements of LivaNova and its consolidated subsidiaries have been prepared in accordance with U.S. GAAP on an interim basis.

New accounting pronouncements are disclosed in “Note 18. New Accounting Pronouncements” contained in the condensed consolidated financial statements in this Quarterly Report on Form 10-Q.

Other

U.S. Tax Reform

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (the “Act”). The Act, which is also commonly referred to as “U.S. tax reform”, significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% commencing in 2018. In addition, the Act created a one-time mandatory tax, a toll charge, on previously deferred foreign earnings of non-U.S. subsidiaries controlled by a U.S. corporation, or, in our case, a non-U.S. subsidiary controlled by one of our U.S. subsidiaries.

The Act also establishes various other new U.S. corporate income tax laws that will affect 2018, including, but not limited to, (1) elimination of the corporate alternative minimum tax (AMT); (2) the creation of the base erosion anti-abuse tax (BEAT), a new minimum tax; (3) a new provision designed to tax global intangible low-taxed income (GILTI); (4) a new limitation on deductible interest expense; (5) the repeal of the domestic production activity deduction; (6) limitations on the deductibility of certain executive compensation; and (7) limitations on net operating losses (NOLs) generated after December 31, 2017, to 80 percent of taxable income. The extent to which these and other provisions of the Act, or future legislation or regulations, could impact our consolidated effective income tax rate in future periods depends on many factors including, but not limited to, the amount of profit generated by our subsidiaries operating in the U.S., the impact of the Company’s current or contemplated tax planning strategies, the impact of new or amended tax laws or regulations by countries outside the U.S., and other factors beyond our control.

Further regulations and notices and state conformity could be issued as a result of U.S. tax reform covering various issues that may affect our tax position including, but not limited to, an increase in the corporate state tax rate and elimination of the interest deduction. The content of any future legislation, the timing for regulations, notices, and state conformity, and the reporting periods that would be impacted cannot be determined at this time. Although we believe the non-cash net charge of \$27.5 million recorded in the fourth quarter of 2017 is a reasonable estimate of the impact of the income tax effects of the Act on LivaNova, the estimate is provisional. Once we finalize certain tax positions for our 2017 U.S. consolidated tax return, we will be able to conclude whether any further adjustments to our tax positions are required.

Brexit

On June 23, 2016, the UK held a referendum in which voters approved an exit from the EU, commonly referred to as “Brexit.” On March 29, 2017, the UK government gave formal notice of its intention to leave the EU, formally commencing the negotiations regarding the terms of withdrawal between the UK and the EU and on March 19, 2018, the UK and the EU released a draft withdrawal agreement highlighting the progress made between the two parties on the terms of a transition period that will usher the UK out of the EU. Unless the deadline is extended, the UK will leave the EU on March 2, 2019. The negotiation process will determine the future terms of the UK’s relationship with the EU. The notification does not change the application of existing tax laws, and does not establish a clear framework for what the ultimate outcome of the negotiations and legislative process will be.

Various tax reliefs and exemptions that apply to transactions between EU Member States under existing tax laws may cease to apply to transactions between the UK and EU Member States when the UK ultimately withdraws from the EU. It is unclear at this stage if or when any new tax treaties between the UK and the EU or individual EU Member States will replace those reliefs and exemptions. It is also unclear at this stage what financial, trade and legal implications will ensue from Brexit and how Brexit may affect us, our customers, suppliers, vendors, or our industry.

Several of our wholly owned subsidiaries that are domiciled either in the UK, various EU Member States, or in the United States, and our parent company, LivaNova PLC, are party to intercompany transactions and agreements under which we receive various tax reliefs and exemptions in accordance with applicable international tax laws, treaties and regulations. If certain treaties applicable to our transactions and agreements are not renegotiated or replaced with new treaties containing terms, conditions and attributes similar to those of the existing treaties, Brexit may have a material adverse impact on our future financial results and results of operations. During the two-year negotiation period, we will monitor and assess the potential impact of this event and explore possible tax-planning strategies that may mitigate or eliminate any such potential adverse impact. We will not account for the impact of Brexit in our income tax provisions until changes in tax laws or treaties between the UK and the EU or individual EU Member States with the UK and/or the U.S. are enacted or the withdrawal becomes effective.

European Union State Aid Challenge

On October 26, 2017, the European Commission (“EC”) announced that an investigation will be opened with respect to the UK’s controlled foreign company (“CFC”) rules. The CFC rules under investigation provide certain tax exceptions to entities controlled by UK parent companies that are subject to lower tax rates if the activities being undertaken by the CFC relate to financing. The EC is investigating whether the exemption is a breach of EU State Aid rules. The investigation is in its early stages and is unlikely to be completed within the next twelve months with an appeal process likely to follow. It is unclear as to whether the UK will be part of the EU once a decision has been finalized due to Brexit and what impact, if any, Brexit will have on the outcome of the investigation or the enforceability of a decision. Due to the many uncertainties related to this matter, including the preliminary state of the investigation, the pending Brexit negotiations and political environment and the unknown outcome of the investigation and resulting appeals, no uncertain tax position reserve has been recognized related to this matter and we are unable to reasonably estimate the potential liability.

Results of Operations

We are reporting, in this Quarterly Report on Form 10-Q, the results for LivaNova and its consolidated subsidiaries for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017.

The following table summarizes our condensed consolidated results of operations (in thousands):

	Three Months Ended March 31,	
	2018	2017
Net sales	\$ 250,398	\$ 226,825
Cost of sales	84,598	79,968
Product remediation	3,715	(792)
Gross profit	162,085	147,649
Operating expenses:		
Selling, general and administrative	104,161	87,340
Research and development	31,752	20,386
Merger and integration expenses	2,960	2,186
Restructuring expenses	1,881	10,030
Amortization of intangibles	8,801	7,960
Total operating expenses	149,555	127,902
Operating income from continuing operations	12,530	19,747
Interest income	447	273
Interest expense	(2,111)	(2,315)
Gain on acquisition of ImThera Medical, Inc.	11,484	—
Foreign exchange and other (losses) gains	(273)	3,173
Income from continuing operations before tax	22,077	20,878
Income tax expense	3,893	5,655
Losses from equity method investments	(362)	(1,996)
Net income from continuing operations	17,822	13,227
Net loss from discontinued operations	(4,549)	(1,956)
Net income	<u>\$ 13,273</u>	<u>\$ 11,271</u>

Net Sales

The table below presents net sales by operating segment and geographic region (in thousands, except for percentages):

	Three Months Ended March 31,		% Increase (Decrease)
	2018	2017	
Cardiopulmonary			
United States	\$ 38,445	\$ 32,176	19.5 %
Europe	36,870	30,609	20.5 %
Rest of world	49,815	44,513	11.9 %
	<u>125,130</u>	<u>107,298</u>	16.6 %
Heart Valves			
United States	6,536	6,069	7.7 %
Europe	12,116	10,347	17.1 %
Rest of world	12,390	15,490	(20.0)%
	<u>31,042</u>	<u>31,906</u>	(2.7)%
Cardiac Surgery			
United States	44,981	38,245	17.6 %
Europe	48,986	40,956	19.6 %
Rest of world	62,205	60,003	3.7 %
	<u>156,172</u>	<u>139,204</u>	12.2 %
Neuromodulation			
United States	77,992	73,659	5.9 %
Europe	10,291	7,929	29.8 %
Rest of world	5,561	5,571	(0.2)%
	<u>93,844</u>	<u>87,159</u>	7.7 %
Other	<u>382</u>	<u>462</u>	(17.3)%
Totals			
United States	122,973	111,904	9.9 %
Europe ⁽¹⁾	59,277	48,885	21.3 %
Rest of world	68,148	66,036	3.2 %
Total	<u>\$ 250,398</u>	<u>\$ 226,825</u>	10.4 %

(1) Europe sales include those countries in which we have a direct sales presence, whereas European countries in which we sell through distributors are included in Rest of world.

The table below presents segment income from operations (in thousands):

	Three Months Ended March 31,		% Change
	2018	2017	
Cardiac Surgery	\$ 10,258	\$ 16,033	(36.0)%
Neuromodulation	38,734	40,756	(5.0)%
Other	(22,820)	(16,866)	(35.3)%
Total Reportable Segment's Income from Operations ⁽¹⁾	<u>\$ 26,172</u>	<u>\$ 39,923</u>	(34.4)%

(1) For a reconciliation of segment operating income to consolidated operating income refer to "Note 16. Geographic and Segment Information" in the condensed consolidated financial statements in this Quarterly Report on Form 10-Q.

Cardiac Surgery

Cardiac Surgery net sales increased \$17.0 million, or 12.2%, for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017 due to a \$10.1 million positive impact from foreign currency exchange rate fluctuations and a \$10.0 million increase in Cardiopulmonary product sales, partially offset by a \$3.1 million decline in heart valve sales. Sales growth in Cardiopulmonary products were primarily driven by strong HLM sales in every region as we continue to make progress towards upgrading customers from our legacy S3 heart-lung machines to our current S5 machines. The \$3.1 million decline in heart valve sales for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017 was primarily due to the cancellation of a contract manufacturing agreement beginning in 2018 which impacted the comparison to the comparable prior period by approximately \$2.6 million. Strong growth in demand for the Perceval sutureless aortic heart valve mostly offset continuing global declines in traditional tissue and mechanical heart valves.

Cardiac Surgery operating income decreased by \$5.8 million for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017 primarily driven by increases in research and development (“R&D”) and selling general and administrative (“SG&A”) expenses and a negative impact from foreign currency exchange rate fluctuations. R&D expenses increased \$4.9 million for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017 and were mostly associated with Perceval clinical studies and investments to support our next generation of HLM products. SG&A expenses increased \$13.3 million for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017 and were mostly due to investments in our sales and marketing efforts across all geographic regions with a focus on supporting the growth of HLM and Perceval sales. The increases in costs during the three months ended March 31, 2018 were partially offset by increased operating income associated with the \$17.0 million increase in sales.

Neuromodulation

During the three months ended March 31, 2018, we began to include the results of heart failure within the Neuromodulation segment for internal reporting purposes in order to manage and evaluate business activities for purposes of allocating resources and assessing performance. Segment results for the three months ended March 31, 2017 have been restated to conform to the current period presentation.

Neuromodulation net sales increased \$6.7 million, or 7.7%, for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017 primarily due to improved product mix associated with strong demand for the SenTiva VNS Therapy System which was launched in October 2017.

Neuromodulation operating income for the three months ended March 31, 2018 was \$38.7 million as compared to \$40.8 million for the three months ended March 31, 2017. The decrease in operating income was primarily due to a \$5.4 million increase in SG&A expenses due to an increase in sales and marketing activity and \$2.1 million of additional research and development costs for heart failure. Additionally, the results of ImThera added \$1.0 million in operating costs during the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. The increases in costs during the three months ended March 31, 2018 were partially offset by the increase in operating income associated with the \$6.7 million increase in sales.

Cost of Sales and Expenses

The table below presents our comparative cost of sales and significant expenses as a percentage of sales:

	Three Months Ended March 31,		Change
	2018	2017	
Cost of sales	33.8%	35.3 %	(1.5)%
Product remediation	1.5%	(0.3)%	1.8 %
Gross profit	64.7%	65.1 %	(0.4)%
Operating expenses:			
Selling, general and administrative	41.6%	38.5 %	3.1 %
Research and development	12.7%	9.0 %	3.7 %
Merger and integration expenses	1.2%	1.0 %	0.2 %
Restructuring expenses	0.8%	4.4 %	(3.6)%
Amortization of intangibles	3.5%	3.5 %	— %

Cost of Sales

Cost of sales consisted primarily of direct labor, allocated manufacturing overhead, the acquisition cost of raw materials and components. Cost of sales as a percentage of net sales decreased by 1.5% to 33.8% for the three months ended March 31, 2018 as compared to the prior year period. The improvement was primarily driven by product mix, pricing discipline and the continued focus on cost efficiencies partially offset by the impact from foreign currency exchange rate fluctuations.

Sales, General and Administrative (“SG&A”) Expenses

SG&A expenses consisted of sales, marketing, general and administrative activities. SG&A expenses for the three months ended March 31, 2018 increased as a percentage of net sales by 3.1% to 41.6% when compared to the prior year period. The increase was primarily due to an increase in sales and marketing related to our growth drivers, the impact from foreign currency exchange rate fluctuations, legal costs primarily attributable to litigation related to our 3T devices and expenses incurred to support the growth of the Company.

Research and Development (“R&D”) Expenses

R&D expenses consist of product design and development efforts, clinical study programs and regulatory activities, which are essential to the Company’s strategic portfolio initiatives, including TMVR, Treatment Resistant Depression and Heart Failure.

R&D expenses for the three months ended March 31, 2018 increased as a percentage of net sales by 3.7% to 12.7%. The increase was primarily due to the inclusion of the results of Caisson and ImThera in the three months March 31, 2018 which were not included in the results for the comparable prior period and accounted for \$6.0 million or 2.4% of the increase. The additional increase as compared to the prior year was due to investments in next-generation products, clinical trials and investments in heart failure and TMVR.

Merger and Integration Expenses

Merger and integration expenses consisted primarily of consulting costs associated with computer systems integration efforts, organization structure integration, synergy and tax planning, as well as the integration of internal controls for the two legacy organizations.

Merger and integration expenses as a percentage of net sales were essentially unchanged at approximately 1.2% and 1.0% of net sales for the three months ended March 31, 2018 and 2017, respectively.

Restructuring Expenses

Restructuring expenses were primarily related to our efforts under our Reorganization Plans and the Suzhou, China exit plan, to leverage economies of scale, eliminate duplicate corporate expenses and streamline distributions, logistics and office functions in order to reduce overall costs. Restructuring expenses as a percentage of net sales continue to decline from 4.4% for the three months ended March 31, 2017 to 0.8% for the three months ended March 31, 2018.

Restructuring expenses for the three months ended March 31, 2017 included \$5.1 million in expenses related to the Suzhou, China exit plan.

Gain on ImThera

On January 16, 2018, we acquired the remaining outstanding interests of ImThera for cash consideration of up to \$225 million. The fair value of our previously-held interest in ImThera was determined based on the fair value of total consideration transferred and application of a discount for lack of control. As a result, we recognized a gain of \$11.5 million for the fair value in excess of our carrying value of \$14.1 million.

Foreign Exchange and Other (Losses) Gains

Foreign exchange and other (losses) gains were \$(0.3) million and \$3.2 million for the three months ended March 31, 2018 and March 31, 2017, respectively. The losses for the three months ended March 31, 2018 were primarily due to net foreign currency losses associated with foreign currency commercial transactions, freestanding foreign currency forward contracts, intercompany debt, and third-party financial assets and liabilities. The gains of \$3.2 million recorded during the three months ended March 31, 2017 consisted primarily of a \$3.2 million gain on the sale of our investment of Istituto Europeo di Oncologia S.R.L.

Income Taxes

LivaNova PLC is domiciled and resident in the UK. Our subsidiaries conduct operations and earn income in numerous countries and are subject to the laws of taxing jurisdictions within those countries, and the income tax rates imposed in the tax jurisdictions in which our subsidiaries conduct operations vary. As a result of the changes in the overall level of our income, the deployment of various tax strategies and the changes in tax laws, our consolidated effective income tax rate may vary from one reporting period to another.

During the three months ended March 31, 2018 and March 31, 2017, we recorded income tax expense from continuing operations of \$3.9 million and \$5.7 million, respectively, with a consolidated effective income tax rate of 17.6% and 27.1%, respectively.

Our consolidated effective income tax rate for the three months ended March 31, 2017 was impacted by various discrete tax items, including the recognition of a \$3.0 million deferred tax asset related to a reserve for an uncertain tax position recognized in a prior year.

Compared with the three months ended March 31, 2017, the lower effective tax rate for the three months ended March 31, 2018 was primarily attributable to the impact of U.S. tax reform and certain law changes in the UK that occurred in the three months ended December 31, 2017.

Losses from Equity Method Investments

Losses from equity method investments were \$0.4 million and \$2.0 million during the three months ended March 31, 2018 and 2017, respectively. Losses for the three months ended March 31, 2018 were due to our equity method investee's losses from Highlife S.A.S. Losses for the three months ended March 31, 2017 included investee losses from Highlife S.A.S and Caisson.

Liquidity and Capital Resources

Based on our current business plan, we believe that our existing cash and cash equivalents, future cash generated from continuing operations, and available borrowing capacity under our credit facilities will be sufficient to fund our expected operating needs, working capital requirements, R&D opportunities, capital expenditures and debt service requirements over the next 12 months. We regularly review our capital needs and consider various investing and financing alternatives to support our requirements. Refer to "Note 9. Financing Arrangements" in the condensed consolidated financial statements in this Quarterly Report on Form 10-Q for additional information regarding our debt. Our liquidity could be adversely affected by the factors affecting future operating results, including those referred to in "Part II - Item 1A. Risk Factors" in the 2017 Form 10-K.

In connection with the TandemLife acquisition, on February 14, 2018, LivaNova entered into a Bridge Facility Agreement providing a term loan facility with the aggregate principal amount of \$170 million. The Bridge Facility Agreement will terminate on August 14, 2018, but may be extended to February 13, 2019, subject to delivery of prior notice and satisfaction of other conditions. On March 23, 2018, we amended the Bridge Facility Agreement increasing the aggregate principal amount to \$190 million. On April 3, 2018, we borrowed \$190 million under the Bridge Facility Agreement to facilitate the initial payment for our acquisition of TandemLife. We intend to use the proceeds from the sale of the CRM business franchise to repay the borrowings under the Bridge Facility Agreement.

No provision has been made for income taxes on unremitted earnings of our foreign controlled subsidiaries (non-UK subsidiaries) as of March 31, 2018. In the event of the distribution of those earnings in the form of dividends, a sale of the subsidiaries or certain

other transactions, we may be liable for income taxes. However, the tax liability on future distributions should not be significant as most jurisdictions with unremitted earnings have various participation exemptions or no withholding tax.

Cash Flows

Net cash and cash equivalents provided by (used in) operating, investing and financing activities and the net (decrease) increase in the balance of cash and cash equivalents were as follows (in thousands):

	Three Months Ended March 31,	
	2018	2017
Operating activities	\$ 20,393	\$ 33,207
Investing activities	(83,352)	(10,071)
Financing activities	32,047	(690)
Effect of exchange rate changes on cash and cash equivalents	2,261	484
Net (decrease) increase	<u>\$ (28,651)</u>	<u>\$ 22,930</u>

Operating Activities

Cash provided by operating activities during the three months ended March 31, 2018 decreased \$12.8 million as compared to the same prior-year period. The decrease primarily represents a decrease in net income excluding non-cash items of \$14.4 million.

Investing Activities

Cash used in investing activities during the three months ended March 31, 2018 increased \$73.3 million as compared to the same prior-year period. The increase primarily resulted from cash paid for the 2018 acquisition of ImThera Medical, Inc, net of cash acquired, of \$77.6 million and the 2017 proceeds from the sale of a cost-method investment of \$3.2 million. These items were partially offset by the 2017 loans to equity-method investees of \$5.3 million in addition to a decrease in purchases of property, plant and equipment of \$1.7 million.

Financing Activities

Cash provided by financing activities during the three months ended March 31, 2018 increased \$32.7 million as compared to the same prior-year period. The increase primarily resulted from an increase in net short-term borrowing proceeds of \$35.0 million.

Contractual Obligations

We had no material changes in our contractual commitments and obligations from amounts listed under “Part II, Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources” in our Annual Report on Form 10-K for the year ended December 31, 2017.

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

We are exposed to certain market risks as part of our ongoing business operations, including risks from foreign currency exchange rates, interest rate risks and concentration of procurement suppliers that could adversely affect our consolidated financial position, results of operations or cash flows. We manage these risks through regular operating and financing activities and, at certain times, derivative financial instruments. Quantitative and qualitative disclosures about these risks are included in this Form 10-Q in “Part I, Note 10. Derivatives and Risk Management”, “Part I, Item 2. Management’s Discussion and Analysis of Financial Conditions and Results of Operations” and “Part II, Item 1A. Risk Factors”, and in our 2017 Form 10-K in “Part II, Item 7A Management’s Discussion and Analysis of Financial Condition and Results of Operations.” and “Part I, Item 1A. Risk Factors”. There have been no material changes from the information provided therein.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

We maintain a system of disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act, that are designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. This information is also accumulated and communicated to management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosure. Our management, under the supervision and with the participation of our CEO and CFO, evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the most recent fiscal quarter reported herein. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of March 31, 2018.

(b) Changes in Internal Control Over Financial Reporting

Upon adoption of ASC Update ("ASU") No 2014-09, Revenue from Contracts with Customers, we implemented new internal controls related to our accounting policies and procedures, including review controls to ensure contractual terms and conditions that may require consideration under the standard are properly identified and analyzed. There have been no other changes in our internal control over financial reporting (as defined in Rules 13a-15(f) under the Exchange Act) during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. *Legal Proceedings*

For a description of our material pending legal and regulatory proceedings and settlements, refer to “Note 11. Commitments and Contingencies” in our condensed consolidated financial statements included in this Report on Form 10-Q.

Item 1A. *Risk Factors*

There were no material changes to the description of the risk factors associated with our business previously disclosed in Part I, Item 1A “Risk Factors” of our 2017 Form 10-K.

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

None

Item 3. *Defaults Upon Senior Securities*

None.

Item 4. *Mine Safety Disclosures*

Not applicable.

Item 5. *Other Information*

None.

Item 6. Exhibits

The exhibits marked with the asterisk symbol (*) are filed or furnished (in the case of Exhibit 32.1) with this Quarterly Report on Form 10-Q. The exhibits marked with the cross symbol (†) are management contracts or compensatory plans or arrangements filed pursuant to Item 601(b)(10)(iii) of Regulation S-K.

Exhibit Number	Document Description	Report or Registration Statement	SEC File or Registration Number	Exhibit Reference
2.1	Stock and Asset Purchase Agreement, dated as of March 8, 2018, by and among LivaNova PLC, MicroPort Cardiac Rhythm B.V. and MicroPort Scientific Corporation	LivaNova PLC Current Report on Form 8-K, filed on March 8, 2018	001-37599	2.1
10.1†	2018 LivaNova Short-Term Incentive Plan	LivaNova PLC Current Report on Form 8-K, filed on February 12, 2018	001-37599	10.1
10.2†	Description of 2018 Long Term Incentive Plan	LivaNova PLC Current Report on Form 8-K, filed on March 16, 2018	001-37599	10.1
10.3†	Form of 2018 Long Term Incentive Plan RSU Award Agreement	LivaNova PLC Current Report on Form 8-K, filed on March 16, 2018	001-37599	10.2
10.4†	Form of 2018 Long Term Incentive Plan SAR Award Agreement	LivaNova PLC Current Report on Form 8-K, filed on March 16, 2018	001-37599	10.3
10.5†	Form of 2018 Long Term Incentive Plan PSU Award Agreement (rTSR condition)	LivaNova PLC Current Report on Form 8-K, filed on March 16, 2018	001-37599	10.4
10.6†	Form of 2018 Long Term Incentive Plan PSU Award Agreement (FCF condition)	LivaNova PLC Current Report on Form 8-K, filed on March 16, 2018	001-37599	10.5
10.8†	Consultancy Agreement between LivaNova Plc Italian Branch and Brian Sheridan, dated July 1, 2017	LivaNova PLC Current Report on Form 8-K, filed on March 26, 2018	001-37599	10.1
16.1	Letter from PricewaterhouseCooper SpA to the Securities and Exchange Commission, dated March 26, 2018	LivaNova PLC Current Report on Form 8-K, filed on March 26, 2018	001-37599	16.1
31.1*	Certification of the Chief Executive Officer of LivaNova PLC pursuant to Section 302 of the Sarbanes-Oxley Act of 2002			
31.2*	Certification of the Chief Financial Officer of LivaNova PLC pursuant to Section 302 of the Sarbanes-Oxley Act of 2002			
32.1*	Certification of the Chief Executive Officer and Chief Financial Officer of LivaNova PLC pursuant to Section 906 of the Sarbanes-Oxley Act of 2002			
101*	Interactive Data Files Pursuant to Rule 405 of Regulation S-T: (i) the Condensed Consolidated Statements of Income for the three months ended March 31, 2018 and March 31, 2017, (ii) the Condensed Consolidated Statements of Comprehensive Income for the three months ended March 31, 2018 and March 31, 2017, (iii) the Condensed Consolidated Balance Sheet as of March 31, 2017 and December 31, 2017, (iv) the Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2018 and March 31, 2017, and (vi) the Notes to the Condensed Consolidated Financial Statements.			

SIGNATURE

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.

LIVANOVA PLC

By: /s/ DAMIEN MCDONALD

Damien McDonald
Chief Executive Officer
(Principal Executive Officer)

LIVANOVA PLC

By: /s/ THAD HUSTON

Thad Huston
Chief Financial Officer
(Principal Financial Officer)

Date: May 2, 2018

CERTIFICATION

I, Damien McDonald, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended March 31, 2018, filed by LivaNova PLC and its consolidated subsidiaries;

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

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

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

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

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

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

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;

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 2, 2018

/s/ DAMIEN MCDONALD

Damien McDonald

Chief Executive Officer

(Principal Executive Officer)

CERTIFICATION

I, Thad Huston, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended March 31, 2018, filed by LivaNova PLC and its consolidated subsidiaries;

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

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

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

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

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

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

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;

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 2, 2018

/s/ THAD HUSTON

Thad Huston

Chief Financial Officer

(Principal Financial Officer)

**CERTIFICATION OF THE
CHIEF EXECUTIVE OFFICER AND
CHIEF FINANCIAL OFFICER
OF LIVANOVA PLC
PURSUANT TO 18 U.S.C. SECTION 1350**

Each of Damien McDonald, Chief Executive Officer of LivaNova PLC (the “Company”), and Thad Huston, Chief Financial Officer of the Company, each hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

(a) the Quarterly Report on Form 10-Q of the Company and its consolidated subsidiaries for the quarter ended March 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(b) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 2, 2018

/s/ DAMIEN MCDONALD

Damien McDonald
Chief Executive Officer
(Principal Executive Officer)

/s/ THAD HUSTON

Thad Huston
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as a part of this report or on a separate disclosure document.

