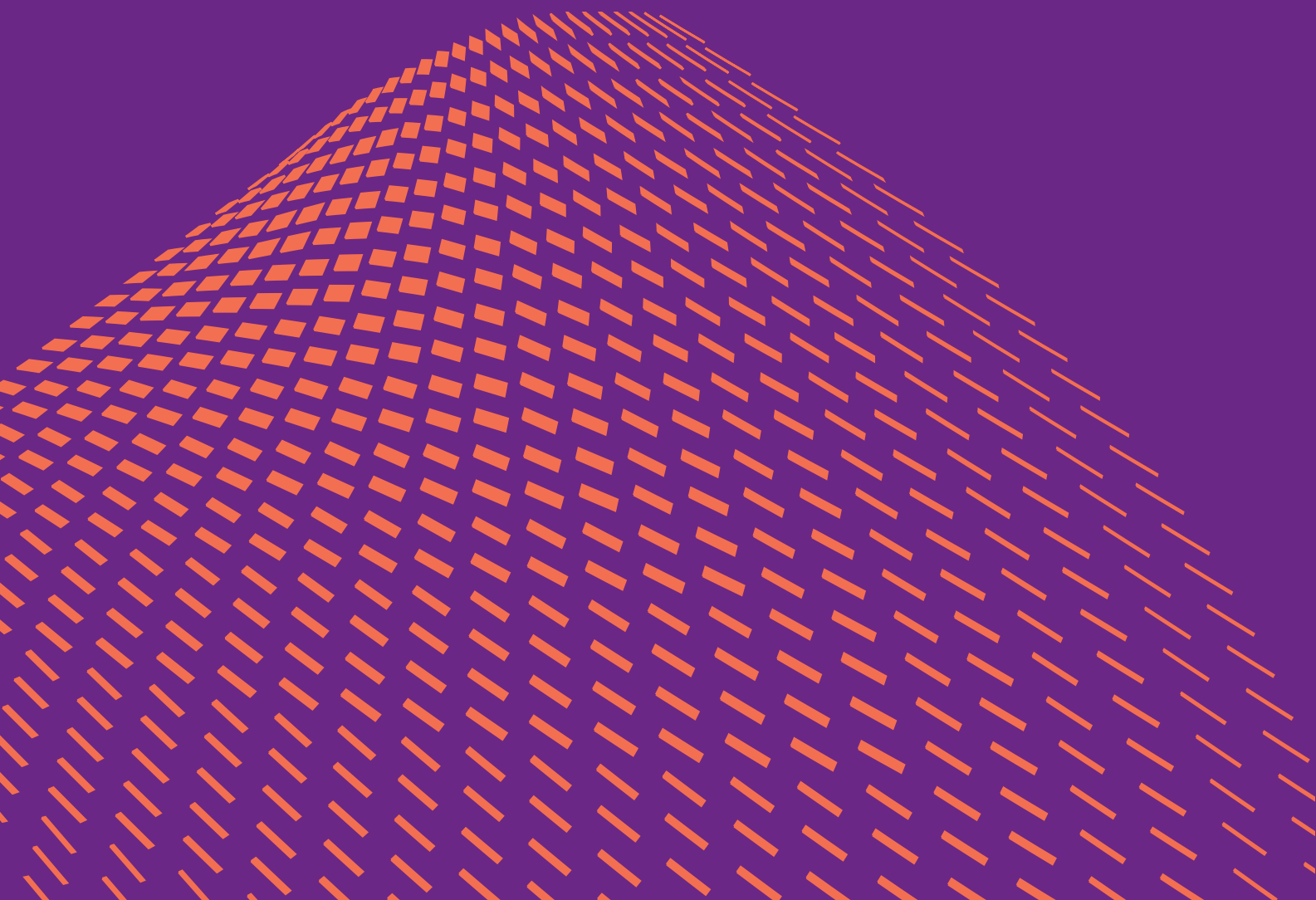
2017 UK Annual Report

LivaNova

Health innovation that matters



This UK Annual Report of LivaNova PLC comprises the Strategic Report, Directors' Report, and Directors' Remuneration Report and the LivaNova PLC consolidated and company UK GAAP Financial Statements in respect of the year ended 31 December 2017 contained herein.

This UK Annual Report has been prepared to satisfy the reporting requirements of the Companies Act 2006 and will be included in the 2018 Annual General Meeting materials made available to shareholders.

Cautionary statement

Certain statements made in this UK Annual Report are forward looking. Such statements are based on current expectations and are subject to a number of risks and uncertainties that could cause actual results to differ materially from any expected future events or results referred to in the forward looking statements. Unless otherwise required by applicable laws, regulations or accounting standards, LivaNova do not undertake any obligation to update or revise any forward looking statements, whether as a result of new information, future developments or otherwise. Nothing in this UK Annual Report should be regarded as a profit forecast.

- Trademarks for LivaNova's VNS therapy systems, the VNS Therapy® System, the VITARIA®TM System and LivaNova's proprietary Pulse generators products: Model 102 (PulseTM), Model 102R (Pulse DuoTM), Model 103 (Demipulse®), Model 104 (Demipulse Duo®), Model 105 (AspireHC®), Model 106 (AspireSR®) and Model 1000 (SenTiva™).

- Trademarks for LivaNova's Oxygenators product systems: InspireTM, HeartlinkTM and ConnectTM.

- Trademarks for LivaNova's line of surgical tissue and mechanical valve replacements and repair products: MitroflowTM, Crown PRTTM, Solo SmartTM, PercevalTM, Top HatTM, Reduced Series Aortic ValvesTM, Carbomedics Carbo-SealTM, Carbo-Seal ValsalvaTM, Carbomedics StandardTM, OrbisTM and OptiformTM, and Mitral valve repair products: Memo 3DTM, Memo 3D ReChordTM, AnnuloFloTM and AnnuloFlexTM.

- Trademarks for LivaNova's implantable cardiac pacemakers and associated services: REPLY 200TM, ESPRITTM, KORA 100TM, KORA 250TM, SafeRTM, the REPLY CRT-PTM, the remedé® System.

- Trademarks for LivaNova's Implantable Cardioverter Defibrillators and associated technologies: the INTENSIATM, PLATINIUMTM, and PARADYM® product families.

- Trademarks for LivaNova's cardiac resynchronisation therapy devices, technologies services: SonR®, SonRtipTM, SonR CRTTM, the INTENSIATM, PARADYM RFTM, PARADYM 2TM and PLATINIUMTM product families and the Respond CRTTM clinical trial.

- Trademarks for heart failure treatment product: Equilia®TM.

- Trademarks for LivaNova's bradycardia leads: BEFLEXTM (active fixation) and XFINETM (passive fixation).

These trademarks and trade names are the property of LivaNova or the property of LivaNova's consolidated subsidiaries and are protected under applicable intellectual property laws. Solely for convenience, LivaNova's trademarks and trade names referred to in this Annual Report may appear without the ® or TM symbols, but such references are not intended to indicate in any way that LivaNova will not assert, to the fullest extent under applicable law, LivaNova's rights to these trademarks and trade names.

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STRATEGIC REPORT

Introduction

This Strategic Report presents the required strategy and business review for the Company in order to satisfy the reporting requirements of the Companies Act.

I. Overview

LivaNova PLC, headquartered in London, is 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 our global team of 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.

We were organized under the laws of England and Wales on 20 February 2015 for the purpose of facilitating the business combination of Cyberonics, Inc., a Delaware corporation and Sorin S.p.A., a joint stock company organized under the laws of Italy. The business combination of Cyberonics and Sorin became effective on 19 October 2015, at which time LivaNova's Ordinary Shares were listed for trading on the Nasdaq Global Market and the London Stock Exchange under the trading symbol "LIVN." On 5 April 2017, we delisted from the LSE and are currently only listed for trading on the Nasdaq and are thus now a "quoted company" (rather than a "traded company") for English company law purposes.

II. Business

A. LivaNova's Strategy

LivaNova is a focused medical innovator concentrating our portfolio around the head and the heart. Our goals are to:

- Improve the quality of patients' lives
- Leverage our leadership positions in neuromodulation and cardiac surgery
- Target underserved and high-growth market segments

During 2017, we commenced a project to divest our Cardiac Rhythm Management business to better focus on areas where we have market leadership and ensure that our portfolio is optimally positioned to deliver long-term value.

We believe that our innovative technologies and disciplined portfolio management provides us with the following near-term growth drivers:

- Neuromodulation. We operate in the $4.1 billion neuromodulation market where our Vagus Nerve Stimulation devices help patients suffering from drug-resistant epilepsy and treatment-resistant depression. In 2017, we obtained indications for MRI compatibility and pediatric expansion to patients as young as four years of age. We also launched our latest generation VNS device, Sentiva, which senses and responds to bradycardia and tachycardia while providing a next generation programmer and wireless wand.
- Heart Lung Machines. For the last 40 years we have been the leader in heart-lung machines . Our S5 HLM reduces transfusions and minimises recovery time for patients.
- Oxygenators. Our Inspire oxygenator provides clinicians with personalised perfusion options for their patients. To date, more than 750,000 patients have been treated with Inspire.
- Perceval. With 10 years of clinical use, Perceval, our sutureless valve, optimises surgical approach to aortic valve replacement.

In addition to our near-term revenue drivers, we have established strategic initiatives with the potential to drive significant growth in the following areas:

- *Treatment resistance depression*. Depression is a leading cause of disability worldwide and VNS may provide better outcomes for patients suffering from TRD. As reimbursement coverage becomes available in key countries, we expect to increase the number of patients that we treat and drive further adoption.

- *Transcatheter mitral valve replacement*. In 2017, we acquired Caisson which provides us with a unique investigational device that allows for transseptal mitral valve replacement. We are early in the development of this product but believe that the market opportunity could be several times the size of the aortic market opportunity.

- *Chronic heart failure*. Today, heart failure is a leading cause of morbidity and mortality. We have developed a novel delivery of Autonomic Regulation Therapy that may improve regulation of cardiovascular function. Clinical trials are currently ongoing.

- *Obstructive sleep apnoea* - with our acquisition of ImThera, we now have an implantable pulse generator that opens the airway during sleep and provide patients with a solution to OSA that does not require the use of continuous positive airway pressure devices.

We are a disciplined acquirer of companies that we believe will create value for our portfolio and our shareholders. We look for companies that align with our existing portfolio, provide access to adjacent markets, and allow us to leverage our existing capabilities to better serve patients.

LivaNova is in the process transforming our organization and driving growth through a culture of continuous improvement. We have organized our priorities around the following four pillars:

- *Growth*. Our teams are focused on creating the tools and standard work to drive demand for our products, build out our product pipelines and expand our portfolio. Key areas of focus are sales force effectiveness, standardising our new product development processes and incorporating user centric design principles.

- *Profitability*. Our goal is to support our growth and make key investments by building better, spending better and pricing better. Key areas of focus are establishing a culture of lean with our manufacturing teams, rationalising SKUs and creating greater pricing consistency.

- *Talent*. Our aspirations of growth require that we develop existing talent and create an environment that will attract new talent. We are focused on programs that develop our existing employees, reward our top performers and provide enhanced opportunities for our best employees.

- *Culture*. We are focused on a creating a performance based culture that is built on the concepts of continuous improvement, accountability, discipline and teamwork. We believe that with a strong culture and team, we will be able to support our growth and fulfil our mission of improving patients' lives.

B. Business franchises and the New Ventures – Business Model

LivaNova is comprised of two principal business franchises, which are also our reportable segments: Cardiac Surgery and Neuromodulation, corresponding to our primary therapeutic areas. Other corporate activities include corporate business development and New Ventures, focused on new growth platforms and identification of other opportunities for expansion.

On 20 November 2017, we entered into a Letter of Intent to sell our CRM to MicroPort Scientific Corporation and on 8 March 2018, we entered into a definitive Stock and Purchase Agreement to sell the CRM business franchise to MicroPort Cardiac Rhythm B.V. for $190.0 million in cash. Completion of the transaction is subject to receipt of relevant regulatory approvals, including fulfilling the requirements of the Hong Kong Stock Exchange's Major Transaction requirements, and other customary closing conditions. We expect the transaction to close in the second quarter of 2018. Accordingly, the results of operations of the CRM business franchise are reflected as discontinued operations for all periods presented in this Annual Report and related assets and liabilities are presented as held for sale as of 31 December 2017.

Cardiac Surgery

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 and mechanical heart valve replacements and repair products.

Cardiopulmonary Products

During conventional coronary artery bypass graft procedures and heart valve surgery, the patient's heart is temporarily stopped, or arrested. The patient is placed on an extracorporeal circulatory support system that temporarily functions as the patient's heart and lungs and provides blood flow to the body. Our products include systems to enable cardiopulmonary bypass, including heart-lung machines, oxygenators, perfusion tubing sets, cannulae and accessories, as well as related equipment and disposables for autotransfusion and autologous blood washing for neonatal, pediatric and adult patients. Our primary cardiopulmonary products include:

Heart-lung machines

The HLM product group includes heart-lung machines, heater coolers, related cardiac surgery equipment and maintenance services.

Oxygenators and perfusion tubing systems

The oxygenators product group, which includes oxygenators and other disposable devices for extracorporeal circulation, includes the Inspire systems. The Inspire range of products, comprised of 12 models, provides perfusionists with a customizable approach for the benefit of patients.

Connect

Connect is our perfusion charting system. Focused on real time and retrospective calculations and trending tools, Connect assists perfusionists with data management during and after cardiopulmonary bypass.

Heartlink

Heartlink is our goal-directed perfusion system linking the Connect perfusion charting system with the Inspire oxygenator to achieve a better outcome by adapting adequacy of perfusion to the patient, thus reducing post-operative complications and Intensive Care Unit and hospital length of stay. Inspire, Heartlink and Connect products can all be integrated with our HLM machines to deliver a unique perfusion solution combining hardware components, disposable devices and data management systems and can all be integrated with our HLM machines to deliver a unique perfusion solution.

Autotransfusion systems

One of the key elements for a complete blood management strategy is autologous blood transfusion, which involves the collection, processing and reinfusion of the patient's own blood lost at the surgical site during the peri-operative period.

Cannulae

Our cannulae product family, part of the oxygenator product group, is used to connect the extracorporeal circulation to the heart of the patient during cardiac surgery.

Heart Valves and Repair Products

We offer a comprehensive line of products to treat a variety of heart valve disorders, including a complete line of surgical tissue and mechanical valve replacements and repair products for damaged or diseased heart valves. Our heart valves and repair product offerings include:

Tissue heart valves

Our tissue valves include the Mitroflow aortic pericardial tissue valve with phospholipid reduction treatment which is designed to mitigate valve calcification, and the Crown PRT and Solo Smart aortic pericardial tissue valves. CROWN PRT is the latest advancement in stented aortic bioprosthesis technology, featuring surgeon-friendly design, PRT technology, and state-of-the-art hemodynamic and durability performance. CROWN PRT enables intuitive intraoperative handling through a short rinse time, enhanced ease of implant through visible markers and improved radiographic visualization through dedicated X-ray markers. Our Solo Smart aortic pericardial tissue valve is an innovative, completely biological aortic heart valve with no synthetic material and a removable stent. Solo Smart provides the ease of implantation of a stented valve with the hemodynamic performance of a stentless valve.

Self-anchoring tissue heart valves

Perceval is LivaNova's sutureless bioprosthetic device designed to replace a diseased native valve or a malfunctioning prosthetic aortic valve using either traditional or minimally invasive heart surgery techniques. Perceval incorporates a unique technology that allows 100% sutureless positioning and anchoring at the implantation site. This, in turn, offers the potential benefit of reducing the time the patient spends in cardiopulmonary bypass.

Mechanical heart valves

Our wide range of mechanical valve offerings includes the Carbomedics Standard, Top Hat and Reduced Series Aortic Valves, as well as the Carbomedics Carbo-Seal and Carbo-Seal Valsalva aortic prostheses. We also offer the Carbomedics Standard, Orbis and Optiform mechanical mitral valves and Bicarbon Slimline, Bicarbon Fitline and Bicarbon Overline aortic and mitral valves.

Heart valve repair products

Mitral valve repair is a well-established solution for patients suffering from a leaky mitral valve, or mitral regurgitation. We offer a wide range of mitral valve repair products, including the Memo 3D and Memo 3D ReChord, AnnuloFlo and AnnuloFlex.

Neuromodulation

Our Neuromodulation business franchise designs, develops and markets neuromodulation-based medical devices for the treatment of epilepsy and depression.

Neuromodulation Products

Our seminal neuromodulation product, the VNS Therapy® System, is an implantable device authorized for the treatment of drug-resistant epilepsy and TRD. The VNS Therapy System consists of: an implantable pulse generator and connective lead that work to stimulate the vagus nerve; surgical equipment to assist with the implant procedure; equipment and instruction manuals enabling a treating physician to set parameters for a patient's pulse generator; and for epilepsy, magnets to manually suspend or induce nerve stimulation. The VNS Therapy pulse generator and lead are surgically implanted in a subcutaneous pocket in the upper left chest area, generally during an out-patient procedure; the lead (which does not need to be removed to replace a generator with a depleted battery) is connected to the pulse generator and tunnelled under the skin to the vagus nerve in the lower left side of the patient's neck.

VNS therapy for the treatment of epilepsy

Globally, there are several broad types of treatment available to persons with epilepsy: multiple seizure medications, various forms of the ketogenic diet, vagus nerve stimulation, resective brain surgery, trigeminal nerve stimulation, responsive intracranial neurostimulation and deep brain stimulation. Seizure medications typically serve as a first-line treatment and are prescribed for virtually all patients diagnosed with epilepsy. After two seizure medications fail to deliver seizure control, the epilepsy is defined as drug-resistant, at which point, adjunctive non-drug options are considered, including VNS therapy, brain surgery and a ketogenic diet.

In the U.S., our VNS Therapy System was the first medical device treatment approved by the U.S. Food and Drug Administration in 1997 for refractory, drug-resistant epilepsy in adults and adolescents over 12 years of age and is indicated for use as an adjunctive therapy in reducing the frequency of seizures. Other worldwide regulatory bodies have also approved the VNS Therapy System for the treatment of epilepsy, many without age restrictions or seizure-type limitations. Patients with epilepsy can also use a small, hand-held magnet provided with our VNS Therapy System to activate or inhibit stimulation manually. We sell a number of VNS product

models for the treatment of epilepsy, including our Model 102 (PulseTM), Model 102R (Pulse DuoTM), Model 103 (Demipulse®), Model 104 (Demipulse Duo®), Model 105 (AspireHC®) and Model 106 (AspireSR®) and the Model 1000 (SenTivaTM) pulse generators. To date, an estimated 110,000 patients have been treated with our VNS Therapy System for epilepsy.

Our AspireSR generator provides the benefits of VNS Therapy, with an additional feature: automatic stimulation in response to detection of changes in heart rate potentially indicative of a seizure. The AspireSR generator is capable of delivering additional stimulation automatically by responding to a patient's relative heart-rate changes that exceed certain variable thresholds, which are adjustable. Heart-rate changes accompany seizure activity in certain patients. The thresholds are programmed by the patient's physician and can be adjusted to suit the patient's level of physical activity or for other reasons. In October 2017, we obtained FDA approval to market our SenTiva VNS Therapy System, which consists of the SenTiva implantable generator and the next-generation VNS Therapy Programming System. The SenTiva generator is the smallest and lightest device capable of delivering responsive therapy for epilepsy. The SenTiva VNS Therapy Programming System features a wireless wand and a 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 June 2017, the FDA approved our VNS Therapy device for use in patients who are at least four years of age and have partial onset seizures that are refractory to antiepileptic medications. VNS Therapy is the first and only FDA-approved device for drug-resistant epilepsy in this pediatric population. Previously, VNS Therapy was approved by the FDA for patients 12 years or older.

In addition, in June 2017, we received FDA approval, and in August 2017, we received CE Mark approval, for our VNS Therapy device for expanded magnetic resonance imaging labelling affirming VNS Therapy as the only epilepsy device approved by the FDA for MRI scans. Currently, SenTiva, AspireHC and AspireSR models of VNS Therapy technology provide for this expanded MRI access.

VNS for the treatment of depression

In July 2005, the FDA approved the VNS Therapy System for the adjunctive treatment of chronic or recurrent depression for patients 18 years or older who are experiencing a major depressive episode and have not had an adequate response to four or more antidepressant treatments. In May 2007, the Centres for Medicare and Medicaid Services issued a national determination of non-coverage within the United States with respect to reimbursement of the VNS Therapy System for patients with TRD, significantly limiting access to this therapeutic option for most patients. As the result of lack of access following this determination, we have not engaged in significant commercial efforts with respect to TRD in any of our markets. As a result of new clinical evidence, including the completion of a post-approval dosing study and other studies that have resulted in more than five publications in peer-reviewed journals, we submitted a formal request to CMS for reconsideration of VNS therapy for TRD. CMS declined our request for reconsideration in May 2013. In October 2013, two Medicare beneficiaries appealed the lack of coverage by Medicare through the Departmental Appeals Board of the Department of Health and Human Services. In January 2015, the DAB concluded that the record relating to the non-coverage conclusion by CMS is complete and adequately supports the non-coverage determination.

Discontinued Operations Cardiac Rhythm Management business franchise

CRM, presented as discontinued operations in this Annual Report, develops, manufactures and markets products for the diagnosis, treatment, and management of heart rhythm disorders and heart failure.

Corporate Activities and New Ventures

Corporate activities include shared services for finance, legal, human resources and information technology, corporate business development and New Ventures.

The New Ventures group evaluates growth opportunities and new potential areas of investment for the Company to expand our product portfolio to meet emerging patient needs. In particular, New Ventures focuses on innovative technologies to treat three main pathologies: heart failure, sleep apnea and mitral valve regurgitation, areas of unmet clinical need where there is no optimal therapeutic solution for the majority of patients. New Ventures partners with public and private institutions and medical start-ups to develop future therapeutic solutions in these areas.

C. Research and Development

The markets in which we participate are subject to rapid technological advances. Product improvement and innovation are necessary to maintain market leadership. Our R&D efforts are directed toward maintaining or achieving technological leadership in each of the markets we serve to help ensure that patients using our devices and therapies receive the most advanced and effective treatment possible. We remain committed to developing technological enhancements and new uses for existing products and less invasive and new technologies for new and emerging markets to address unmet patient needs. That commitment leads us to initiate and participate in many clinical trials each fiscal year as the demand for clinical and economic evidence remains high.
We also expect our development activities to help reduce patient care costs and the length of hospital stays in the future.

Approximately 20% of our employees work in R&D improving existing products and therapies, expanding their uses and applications and developing new products. We continue to focus on optimising innovation and assessing the ability of our R&D programs to deliver economic value to the customer. More specifically, our current 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.

During the years ended 31 December 2017 and 31 December 2016, the transitional period 25 April 2015 to 31 December 2015, and the year ended 24 April 2015, we spent $109.7 million, $82.5 million, $41.9 million and $42.2 million on R&D, respectively.

D. Acquisitions and Investments

Our strategy of providing a broad range of therapies requires a wide variety of technologies, products and capabilities. The rapid pace of technological development in the medical industry and the specialized expertise required in different areas of medicine make it difficult for one company alone to develop a broad portfolio of technological solutions. In addition to internally generated growth through research and development efforts, we have historically relied, and expect to continue to rely, on acquisitions, investments and alliances to provide access to new technologies in both new and existing markets.

We expect to further our strategic objectives and strengthen our existing businesses by making future acquisitions or investments in areas that we believe we can acquire or stimulate the development of new technologies and products. Mergers and acquisitions of medical technology companies are inherently risky and no assurance can be given that any of our previous or future acquisitions will be successful or will not materially adversely affect our consolidated operations, financial condition and/or cash flows.

Caisson Interventional, LLC

On 2 May 2017, we acquired the remaining 51% equity interests in Caisson Interventional, LLC. Caisson , a clinical-stage medical device company based in Maple Grove, Minnesota, is focused on the design, development and clinical evaluation of a novel transcatheter mitral valve replacement implant device for treating mitral regurgitation through replacement of the native mitral valve using a fully transvenous delivery system. The financial results of Caisson are included within New Ventures.

ImThera Medical, Inc.

On 16 January 2018, we acquired ImThera Medical, Inc. We previously held 14% of ImThera's outstanding equity. Headquartered in San Diego, Calif., ImThera was a privately held company focused on neurostimulation for the treatment of OSA. 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, and we plan to optimize the technology. In the near term, we plan to focus on expanding ImThera's current commercial presence in the European market, while advancing enrolment in a U.S. Food and Drug Administration pivotal study.

TandemLife

On 18 February 2018, LivaNova entered into an agreement to acquire TandemLife, a privately held company focused on advanced cardiopulmonary temporary support solutions. TandemLife offers four product systems, all built around a common pump and controller. These systems, which include ExtraCorporeal Life Support and Percutaneous Mechanical Circulatory Support, are complementary to LivaNova's offerings in cardiac surgery. LivaNova has agreed to pay up to $250 million for TandemLife. Upfront costs total $200 million, with up to $50 million in contingent considerations based on regulatory milestones. The transaction closed on 4 April 2018.

E. Patents and Licenses

We rely on a combination of patents, trademarks, copyrights, trade secrets, and non-disclosure and non-competition agreements to protect our intellectual property. We generally file patent applications in the U.S. and countries where patent protection for our technology is appropriate and available. As of 31 December 2017, we held more than 1,900 issued patents worldwide, with approximately 400 pending patent applications that cover various aspects of our technology, including CRM. Patents typically have a 20-year term from the application filing date. In addition, we hold exclusive and non-exclusive licenses to a variety of third-party technologies covered by patents and pending patent applications. There can be no assurance that pending patent applications will result in the issuance of patents, that patents issued to or licensed by us will not be challenged or circumvented by competitors, or that these patents will be found to be valid or sufficiently broad to protect our technology or to provide us with a competitive advantage. We have also obtained certain trademarks and trade names for our products and maintain certain details about our processes, products and strategies as trade secrets. In the aggregate, these intellectual property assets are considered to be of material importance to our business segments and operations. We regularly review third-party patents and patent applications in an effort to protect our intellectual property and avoid disputes over proprietary rights.

We rely on non-disclosure and non-competition agreements with employees, consultants and other parties to protect, in part, trade secrets and other proprietary technology. There can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, that others will not independently develop equivalent proprietary information or that third parties will not otherwise gain access to our trade secrets and proprietary knowledge.

F. Markets and Distribution Methods

The three largest markets for our medical devices are Europe, the United States and Japan. Emerging markets are an area of increasing focus and opportunity. We sell most of our medical devices through direct sales representatives in the United States and a combination of direct sales representatives and independent distributors in markets outside the United States.

Our marketing and sales strategy is focused on rapid, cost-effective delivery of high-quality products to a diverse group of customers worldwide, including perfusionists, neurologists, neurosurgeons and other physicians, hospitals and other medical institutions and healthcare providers. To achieve this objective, we maintain a highly knowledgeable and dedicated sales staff that is able to foster strong relationships with such a range of customers. We maintain excellent working relationships with professionals in the medical industry, which provides us with a detailed understanding of therapeutic and diagnostic developments, trends and emerging opportunities, enabling us to respond quickly to the changing needs of providers and patients.

We actively participate in medical meetings and conduct comprehensive training and educational activities in an effort to enhance our presence in the medical community, and we believe that these activities also contribute to healthcare professionals' expertise.

Due to the emphasis on cost-effectiveness in healthcare delivery, the current trend among hospitals and other medical device customers is to consolidate into larger purchasing groups in order to enhance purchasing power. As a result, customer transactions have become increasingly complex. Enhanced purchasing power may also lead to pressure on pricing and an increase in the use of preferred vendors. Our customer base continues to evolve to reflect such economic changes across the geographic markets we serve.

G. Customers, Competition and Industry

We compete in the medical device market in more than 5,000 hospitals in more than 100 countries. This market is characterised by rapid change resulting from technological advances and scientific discoveries. Our competitors across our product portfolio range from large manufacturers with multiple business lines to small manufacturers offering a limited selection of specialized products. In addition, we face competition from providers of alternative medical therapies, such as pharmaceutical companies and providers of cannabis.

Product problems, physician advisories, safety alerts and publications about our products can cause major shifts in industry market share, reflecting the importance of product quality, product efficacy and quality systems in the medical device industry. In addition, because of developments in managed care, economically motivated customers, consolidation among healthcare providers, increased competition, and declining reimbursement rates, we may be increasingly required to compete on the basis of price. In order to continue

to compete effectively, we must continue to create or acquire advanced technology, incorporate this technology into proprietary products, obtain regulatory approvals in a timely manner, maintain high-quality manufacturing processes and successfully market these products.

Cardiac Surgery

Our competitors include Terumo Medical Corporation, Maquet Medical Systems, Medtronic Plc, Haemonetics Corporation, Edwards Lifesciences Corp. and Abbott Laboratories, Inc. (formerly St. Jude Medical, Inc.), although not all competitors are present in all product lines.

Neuromodulation

Our primary medical device competitors in the Neuromodulation product group are NeuroPace, Inc. and Medtronic Plc.

H. Production Quality Systems and Availability of Raw Materials

We manufacture a majority of our products at 10 manufacturing facilities located in Italy, Germany, the United States, Canada, Brazil and Australia. We purchase raw materials and many of the components used in our manufacturing facilities from numerous suppliers in various countries. For quality assurance, sole source availability or cost effectiveness purposes, we may procure certain components and raw materials from a sole supplier. We work closely with our suppliers to ensure continuity of supply while maintaining high quality and reliability.

The quality systems we utilize in the design, production, warehousing and distribution of our products are designed to ensure that our products are safe and effective. Some of the governmental agencies and quality system regulations with which we are required to comply are as follows:

- The FDA's Quality System Regulation under section 520 of the federal Food, Drug and Cosmetic Act and its implementing regulations at 21 C.F.R. Part 820.
- The International Standards Organization - EN ISO 13485:2012, Medical devices - Quality management systems.
- The independent certification bodies, DEKRA, LNE/G-MED and TUV SUD, which act as our notified bodies to ensure that our manufacturing quality systems comply with ISO 13485:2003.
- The European Council Directives 93/42/EEC and 90/385/EEC, ISO 13485, which relates to medical devices and active implantable medical devices.

In addition, we utilize environmental management systems and safety programs to protect the environment and our employees. Some of the regulations and governmental agencies with which we comply are as follows:

- The U.S. Environmental Protection Agency
- The Occupational Health and Safety Assessment System
- The European Union Registration, Evaluation, Authorization and Restriction of Chemicals
- Italian regulations under the Integrated Environmental Authorization acts
- ISO 14001 certification

The continuous improvement embodied by the ISO 14001 standard has been a key mechanism by which the Company has measured its environmental performance. The Company measures its improvements through energy cost reduction programs, transportation and car policies, real estate choices, waste management, raw materials management, among others Our Clamart and Munich sites have been ISO 14001 certified, and our Saluggia and Mirandola sites are in the process of working towards such certification. The Company does not have global policies because the ISO 14001 standard is believed to provide a more appropriate standard. Due diligence is conducted in the context of the annual audits associated with the ISO 14001 certification. As noted in our greenhouse gas reporting in the Directors' Report, one of our key key performance indicators is kg CO_2 per full time employee.

I. Government Regulation and Other Considerations

Our medical devices are subject to regulation by numerous government agencies, including the FDA and counterpart agencies outside the United States. To varying degrees, each of these agencies require us to comply with laws and regulations governing the research, development, testing, manufacturing, labelling, pre-market clearance or approval, marketing, distribution, advertising, promotion, record keeping, reporting, tracking, and importing and exporting of medical devices. Our business is also affected by patient privacy and security laws, cost containment initiatives, and environmental health and safety laws and regulations worldwide. The primary laws and regulations that affect our business are described below.

The laws applicable to LivaNova are subject to changing and evolving interpretations. If a governmental authority were to conclude that we are not in compliance with applicable laws and regulations, we and our officers and employees could be subject to severe civil and criminal penalties, including substantial fines and damages, and exclusion from participation as a supplier of product to beneficiaries covered by government programs, among other potential enforcement actions.

United States

Each medical device we seek to distribute commercially in the United States must first receive 510(k) clearance or pre-market approval from the FDA, unless specifically exempted by the agency. The FDA groups medical devices into one of three classes - Class I, Class II or Class III - depending on the degree of risk associated with each medical device and the extent of control needed to ensure safety and effectiveness. Devices deemed to pose lower risk are categorized as either Class I or II, which requires the manufacturer to submit to the FDA a 510(k) pre-market notification requesting clearance for commercial distribution of the device in the United States. Some low-risk devices are exempted from this requirement. Devices deemed by the FDA to pose the greatest risk, such as life sustaining, life-supporting or implantable devices, or devices deemed not substantially equivalent to a previously 510(k)-cleared device, are categorized as Class III, requiring approval of an application for pre-market approval.

510(k) Clearance Process

To obtain 510(k) clearance, LivaNova must submit a pre-market notification to the FDA demonstrating that the proposed device is substantially equivalent to a previously-cleared 510(k) device, a device that was in commercial distribution before May 28, 1976 for which the FDA has not yet called for the submission of approval PMA application, or a device that has been reclassified from Class III to either Class II or I. In rare cases, Class III devices may be cleared through the 510(k) process. The FDA's 510(k) clearance process usually takes three to twelve months from the date the application is submitted and filed with the FDA, but may take significantly longer and clearance is never assured. Although many 510(k) pre-market notifications are cleared without clinical data, in some cases, the FDA requires significant clinical data to support substantial equivalence, which may significantly prolong the review process.

After a device receives 510(k) clearance, any subsequent device modification that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, will require a new 510(k) clearance or could require a PMA. The FDA requires each manufacturer to make this determination initially, but the FDA may review any such decision and may disagree with a manufacturer's determination. If the FDA disagrees with a manufacturer's determination, the FDA may require the manufacturer to cease marketing and/or recall the modified device until the manufacturer obtains a 510(k) clearance or approval of a PMA application. In addition, the FDA is currently evaluating the 510(k) process and may make substantial changes to industry requirements, including which devices are eligible for 510(k) clearance, the ability to rescind previously granted 510(k) clearances and additional requirements that may significantly impact the process.

Pre-market Approval Process

Manufacturers must submit a PMA application for all Class III medical devices (although the FDA has the discretion to continue to allow certain pre-amendment Class III devices to use the 510(k) process) and all other medical devices that cannot be cleared through the 510(k) process. A PMA application typically must be supported by, among other things, extensive technical, pre-clinical and clinical study data, and manufacturing and labelling data to demonstrate the safety and effectiveness of the device to the FDA's satisfaction.

After a manufacturer files a PMA application, the FDA begins an in-depth review process, which typically takes between one and three years, but may take significantly longer. During this review period, the FDA may request additional information or clarification of information already provided. Also during the review period, the FDA often convenes an advisory panel of experts from outside the FDA to review and evaluate the application and provide recommendations to the FDA as to the approval of the device. In addition,

the FDA will conduct a pre-approval inspection of the manufacturing facility to ensure compliance with the QSR, which imposes elaborate design development, testing, control, documentation and other quality assurance procedures related to the design and manufacturing process. The FDA may approve a PMA application with post-approval conditions intended to ensure the safety and effectiveness of the device including, among other things, restrictions on labelling, promotion, sale, and distribution and collection of long-term follow-up data from patients in the clinical study that supported the approval. Failure to comply with the conditions of approval can result in a materially adverse enforcement action, including, among other things, the loss or withdrawal of the approval. Manufacturers must submit a new PMA application or a PMA supplement for approval of significant modifications to the design, indications, labelling or manufacturing process of a PMA-approved device. PMA supplements often require submission of the same type of information as an original PMA application, except that the supplement is limited to information needed to support any changes from the device covered by the original PMA application, and may not require extensive clinical data as extensive as the original PMA application, the convening of an advisory panel or pre-approval inspections.

Clinical Studies

One or more clinical studies may be required to support a 510(k) application and are almost always required to support a PMA application. Manufacturers must conduct clinical studies of unapproved or uncleared medical devices or devices intended for uses for which they are not approved or cleared (investigational devices) in compliance with FDA requirements. If human clinical studies of a device are required and the device presents a significant risk, the sponsor of the study must file an investigational device exemption , application prior to commencing the study. The IDE application must be supported by data, typically including the results of animal and/or laboratory testing. If the IDE application is approved by the FDA and one or more institutional review boards, human clinical studies may begin at a specific number of institutional investigational sites with the specific number of patients approved by the FDA. If the device presents a non-significant risk to the patient, a sponsor may begin the clinical study after obtaining approval for the study by one or more IRBs without separate approval from the FDA. During the study, the sponsor must comply with the FDA's IDE requirements including, for example, investigator selection, monitoring of the clinical study sites, adverse event reporting and record keeping. The investigators must obtain patient informed consent, follow the investigational plan and study protocol, control the disposition of investigational devices and comply with reporting and record keeping requirements. We, the FDA and the IRB at each institution at which a clinical study is being conducted may suspend a clinical study at any time for various reasons, including a belief that the subjects are being exposed to an unacceptable risk.

Continuing Regulation

After a device is cleared or approved for marketing in the United States, numerous and pervasive regulatory requirements continue to apply, and we will continue to be subject to periodic inspections by the FDA to determine its compliance with these requirements, as will its suppliers, contract manufacturers and contract testing laboratories. These requirements include, among others:

- the QSR, which governs, among other things, how manufacturers design, test, manufacture, modify, label, exercise quality control over and document manufacturing and quality issues regarding their products;

- Establishment Registration, which requires establishments involved in the production and distribution of medical devices intended for commercial distribution in the United States, to register with the FDA;

- Medical Device Listing, which requires manufacturers to list with the FDA the devices they have in commercial distribution;

- Labelling and claims regulations, which require that all advertising and promotion of devices be truthful, not misleading and fairly balanced and provide adequate directions for use, and that all claims be substantiated;

- Prohibition of marketing devices for off-label uses, including requirements relating to dissemination of articles and information and responding to unsolicited requests for off-label information;

- Medical Device Reporting regulations, which requires reporting to the FDA if a device may have caused or contributed to a death or serious injury, or if a device has malfunctioned and would be likely to cause or contribute to a death or serious injury if the malfunction were to recur;

- Reporting and record keeping for certain corrections or removals initiated by a manufacturer to reduce a risk to health posed by a device or to remedy a violation of the FDCA caused by the device that may present a risk to health;

- Statutory and regulatory requirements for Unique Device Identifiers on devices and submission of certain information about each device to the FDA's Global Unique Device Identification Database; and

- In some cases, ongoing monitoring and tracking of a device's performance and periodic reporting to the FDA of such performance results.

The FDA enforces these requirements by inspection and market surveillance. The FDA periodically inspects our manufacturing facilities, which potentially includes our suppliers. If the FDA observes conditions that may constitute violations, we must correct the conditions or satisfactorily demonstrate the absence of the violations. The FDA also has the authority to request repair, replacement or refund of the cost of any device manufactured or distributed by us. We continue to expend resources to maintain compliance with our obligations under the FDA's regulations. Failure to comply with applicable regulatory requirements may result in enforcement action by the FDA, which may include one or more of the following sanctions:

- untitled letters or warning letters;
- fines, injunctions and civil penalties;
- mandatory recall or seizure of our products;
- administrative detention or banning of our products;
- operating restrictions, partial suspension or total shutdown of production;
- refusing our request for 510(k) clearance or pre-market approval of new product versions;
- revocation of 510(k) clearance or pre-market approvals previously granted; and
- criminal prosecution and penalties.

Outside the United States

Outside the United States, we are subject to government regulation in the countries in which we operate. Although many of the regulations applicable to our products in these countries are similar to those of the FDA, these regulations vary significantly from country to country and with respect to the nature of the particular medical device. The time required to obtain foreign approvals to market our products may be longer or shorter than the time required in the United States, and requirements for such approvals may differ from FDA requirements.

In the European Economic Area, or EEA, (which is composed of the 28 Member States of the European Union plus Norway, Liechtenstein and Iceland), a single regulatory approval process exists, and conformity with the legal requirements is represented by the CE mark. To obtain CE mark certification, defined products must meet minimum standards of performance, safety and quality (i.e., the essential requirements) set out in the EU Medical Devices Directives (Council Directive 93/42/EEC on Medical Devices and Council Directive 90/385/EEC on Active Implantable Medical Devices). To demonstrate compliance with the essential requirements, we must undergo a conformity assessment procedure, which varies according to the type of medical device and its classification. Except for low-risk medical devices, where the manufacturer can issue an EC Declaration of Conformity based on a self-assessment of the conformity of its products with the essential requirements of the EU Medical Devices Directives, a conformity assessment procedure requires the intervention of an organization accredited by a Member State of the EEA to conduct conformity assessments by a Notified Body. Depending on the relevant conformity assessment procedure, the Notified Body typically audits and examines the technical file and the quality system for the manufacture, design and final inspection of the manufacturer's devices. Following successful completion of a conformity assessment procedure, the Notified Body issues a certificate that entitles the manufacturer to affix the CE mark to its medical devices after having prepared and signed a related EC Declaration of Conformity. Manufacturers with CE marked devices are subject to regular inspections by Notified Bodies to monitor continued compliance with the applicable directives and essential requirements.

As a general rule, demonstration of conformity of medical devices and their manufacturers with the essential requirements must be based, among other things, on the evaluation of clinical data supporting the safety and performance of the products during normal conditions of use. Specifically, a manufacturer must demonstrate that the device achieves its intended performance during normal conditions of use, that the known and foreseeable risks, and any adverse events, are minimised and acceptable when weighed against the benefits of its intended performance, and that any claims made about the performance and safety of the device (e.g., product labelling and instructions for use) are supported by suitable evidence.

In the EEA, clinical studies for medical devices usually require the approval of an Ethics Committee and approval by or notification to the national competent authorities. Both regulators and Ethics Committees also typically require the submission of adverse event reports during a study and may request a copy of the final study report.

The national competent authorities of the EEA countries, generally in the form of their ministries or departments of health, oversee the clinical research for medical devices and are responsible for market surveillance of products once they are placed on the market. We are required to report device failures and injuries potentially related to product use to these authorities in a timely manner. Various penalties exist for non-compliance with the laws setting forth the medical device directives.

In September 2012, the European Commission published proposals for the revision of the EU regulatory framework for medical devices. The proposal would replace the Medical Devices Directive and the Active Implantable Medical Devices Directive with a new regulation (the "Medical Devices Regulation"). Unlike the Directives that must be implemented into national laws, the Regulation would be directly applicable in all EEA Member States and so is intended to eliminate current national differences in regulation of medical devices.

In October 2013, the European Parliament approved a package of reforms to the European Commission's proposals. Under the revised proposals, only designated "special notified bodies" would be entitled to conduct conformity assessments of high-risk devices, such as active implantable devices. These special notified bodies will need to notify the European Commission when they receive an application for a conformity assessment for a new high-risk device. The European Commission will then forward the notification and the accompanying documents on the device to the Medical Devices Coordination Group, (a new, yet to be created, body chaired by the European Commission, and representatives of Member States) for an opinion. These new procedures may result in the re-assessment of our existing medical devices, or a longer or more burdensome assessment of our new products. In May 2016, a political agreement was reached and the tentatively agreed upon text was published in June 2016. In April 2017, Regulation 2017/745 on medical devices was published, beginning a three-year transition period. At the end of this transition period, national competent authorities, Notified Bodies and manufacturers must implement and ensure compliance with the changes enacted in the Reg MDR. Among other things, this new regulation imposes additional reporting requirements on manufacturers of high risk medical devices, imposes an obligation on manufacturers to appoint a "qualified person" responsible for regulatory compliance, and provides for stricter clinical evidence requirements. We have initiated activities to ensure compliance with the MDR by the end of the transition period.

To be sold in Japan, most medical devices must undergo thorough safety examinations and demonstrate medical efficacy before they are granted approval, or "shonin." The Japanese government, through the Ministry of Health, Labour and Welfare, regulates medical devices under the Pharmaceutical Affairs Law. Oversight for medical devices is conducted with participation by the Pharmaceutical and Medical Devices Agency, a quasi-government organization performing many of the review functions for MHLW. Penalties for a company's non-compliance with PAL can be severe, including revocation or suspension of a company's business license and criminal sanctions. MHLW and PMDA also assess the quality management systems of the manufacturer and product conformity to the requirements of the PAL. We are subject to compliance inspections by these agencies.

Many countries in which we operate (outside of the EU, United States and Japan) have their own regulatory requirements for medical devices. Most countries outside of the EU, United States and Japan require that product approvals be recertified on a regular basis, generally every five years. The recertification process requires that we evaluate any device changes and any new regulations or standards relevant to the device and, where needed, conduct appropriate testing to document continued compliance. Where recertification applications are required, they must be approved in order to continue selling our products in those countries. Because export control and economic sanctions laws and regulations are complex and constantly changing, we cannot ensure that laws and regulations may not be enacted, amended, enforced or interpreted in a manner materially impacting our ability to sell or distribute our products.

Our global regulatory environment is becoming increasingly stringent and unpredictable, which could increase the time, cost and complexity of obtaining regulatory approvals for our products. Several countries that did not have regulatory requirements for medical devices have established such requirements in recent years and other countries have expanded, or plan to expand, existing regulations. Certain regulators are requiring local clinical data in addition to global clinical data. While harmonization of global regulations has been pursued, requirements continue to differ significantly among countries. We expect that this global regulatory environment will continue to evolve, which could impact our ability to obtain future approvals for our products, or could increase the cost and time to obtain such approvals in the future. We cannot provide assurance that any new medical devices we develop will be approved in a timely or cost-effective manner, or approved at all.

Promotional Restrictions

Both before and after we release a product for commercial distribution, we have ongoing responsibilities under various laws and regulations governing medical devices. In addition to FDA regulatory requirements, the FDA and other U.S. regulatory bodies (including the Federal Trade Commission, the Office of the Inspector General of the Department of Health and Human Services, the Department of Justice and various state Attorneys General) monitor the manner in which we promote and advertise our products. Although physicians are permitted to use their medical judgement to employ medical devices for indications other than those cleared or approved by the FDA, we are prohibited from promoting products for such "off-label" uses and can only market our products for cleared or approved uses.

Governmental Trade Regulations

The sale and shipment of our products and services across international borders, as well as the purchase of components and products from international sources, subjects us to extensive governmental trade regulations. A variety of laws and regulations apply to the sale, shipment and provision of goods, services and technology across international borders. Many countries control the export and re-export of goods, technology and services for public health, national security, regional stability, antiterrorism and other reasons. Some governments may also impose economic sanctions against certain countries, persons or entities. In certain circumstances, governmental authorities may require that we obtain an approval before we export or re-export goods, technology or services to certain destinations, to certain end-users and for certain end-uses. Because we are subject to extensive regulations in the countries in which we operate, we are subject to the risk that laws and regulations could change in a way that would expose us to additional costs, penalties or liabilities. These laws and regulations govern, among other things, our import and export activities.

We also sell and provide goods, technology and services to agents, representatives and distributors who may export such items to customers and end-users, and if these third parties violate applicable export control and economic sanctions laws and regulations when engaging in transactions involving our products, we may be subject to varying degrees of liability depending on the extent of our participation in the transaction. The activities of these third parties may cause disruption or delays in the distribution and sales of our products, or result in restrictions being placed on our international distribution and sales of products, which may materially impact our business activities.

Patient Privacy and Security Laws

Various laws worldwide protect the confidentiality of certain patient health information, including patient medical records, and restrict the use and disclosure of patient health information by healthcare providers. Privacy standards in Europe and Asia are becoming increasingly strict, enforcement action and financial penalties related to privacy in the EU are growing, and new laws and restrictions are being passed. The management of cross-border transfers of information among and outside of EU member countries is becoming more complex, which may complicate our clinical research activities, as well as product offerings that involve transmission or use of clinical data. We will continue our efforts to comply with those requirements and to adapt our business processes to those standards.

In the United States, the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology and Clinical Health Act and their respective implementing regulations, including the final omnibus rule published on 25 January 2013, imposes specified requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates," defined as independent contractors or agents of covered entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys new general authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways, thus complicating compliance efforts. We potentially operate as a business associate to covered entities in a limited number of instances. In those cases, the patient data that we receive may include protected health information, as defined under HIPAA. Enforcement actions can be costly and interrupt regular operations of our business. While we have not been named in any such actions, if a substantial breach or loss of data from our records were to occur, we could become a target of such litigation.

In the EU, Regulation 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data comes into force on 25 May 2018. The GDPR replaces Directive 95/46/EC. While many of the principles of the GDPR reflect those of the Data Protection Directive, for example in relation to the requirements relating to the privacy, security and transmission of individually identifiable health information, there are a number of changes. In particular: (1) pro-active compliance measures are introduced, such as the requirement to carry out a Privacy Impact Assessment and to appoint a Data Protection Officer

where health data is processed on a "large scale". Although "large scale" is not defined, it is likely that clinical trials involving substantial numbers of patients (or healthy volunteers if applicable) would mean that such requirements apply to LivaNova; and (2) the administrative fines that can be levied are significantly increased, the maximum being the higher of €20 million, or 4%, of the total worldwide annual turnover of the group in the previous financial year.

Cost Containment Initiatives

Government and private sector initiatives to limit the growth of healthcare costs, including price regulation, competitive pricing, bidding and tender mechanics, coverage and payment policies, comparative effectiveness of therapies, technology assessments, and managed-care arrangements, are continuing in many countries where LivaNova does business. These changes are causing the marketplace to put increased emphasis on the delivery of more cost-effective medical devices and therapies. Government programs, private healthcare insurance and managed-care plans have attempted to control costs by limiting the extent of coverage or amount of reimbursement available for particular procedures or treatments, tying reimbursement to outcomes, shifting to population health management, and other mechanisms designed to constrain utilization and contain costs. Hospitals, which purchase implants, are also seeking to reduce costs through a variety of mechanisms, including, for example, creating centralized purchasing functions that set pricing and in some cases limit the number of vendors that can participate in the purchasing program. Hospitals are also aligning their interests with that of physicians through employment and other arrangements, such as gainsharing, whereby a hospital agrees with physicians to share certain realized cost savings resulting from the physicians' collective change in practice patterns, such as standardization of devices where medically appropriate, and participation in affordable care organizations. Such alignment has created increasing levels of price sensitivity among customers for our products.

Some third-party payers must also approve coverage and set reimbursement levels for new or innovative devices or therapies before they will reimburse healthcare providers who use the medical devices or therapies. Even though a new medical device may be cleared for commercial distribution, we may find limited demand for the device until coverage and sufficient reimbursement levels have been obtained from governmental and private third-party payers. In addition, some private third-party payers require that certain procedures or the use of certain products be authorized in advance as a condition of coverage.

In the United States, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the "Affordable Care Act"), for example, has the potential to substantially change healthcare financing and delivery by both governmental and private insurers, and significantly impact the pharmaceutical and medical device industries. The Affordable Care Act imposed, among other things, an annual excise tax of 2.3% on any entity that manufactures or imports medical devices offered for sale in the United States. Due to subsequent legislative amendments the excise tax has been suspended for the period 1 January 2016 to 31 December 2019, and, absent further legislative action, will be reinstated starting 1 January 2020.

In addition, the Affordable Care Act provided incentives to programs that increase the federal government's comparative effectiveness research. The Affordable Care Act also implemented payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models.

International examples of cost containment initiatives and healthcare reforms in markets significant to our business include Japan, where the government reviews reimbursement rate benchmarks every two years. Such reviews may significantly reduce reimbursement for procedures using our medical devices or result in the denial of coverage for those procedures. As a result of our manufacturing efficiencies, cost controls and other cost-savings initiatives, we believe we are well-positioned to respond to changes resulting from this worldwide trend toward cost containment; however, uncertainty remains as to the nature of any future legislation or other reforms, making it difficult for LivaNova to predict the potential impact of cost-containment trends on future operating results.

Applicability of Anti-Corruption Laws and Regulations

Our worldwide business is subject to the U.S. Foreign Corrupt Practices Act of 1977, the United Kingdom Bribery Act of 2010 and other anti-corruption laws and regulations applicable in the jurisdictions where we operate. The FCPA can be used to prosecute companies in the United States for arrangements with physicians, or other parties outside the United States, if the physician or party is a government official of another country and the arrangement violates the law of that country. The UK Bribery Act prohibits both domestic and international bribery, as well as bribery across both public and private sectors There are similar laws and regulations applicable to LivaNova outside the United States, all of which are subject to evolving interpretations.

Health Care Fraud and Abuse Laws

We are also subject to U.S. federal and state government healthcare regulation and enforcement and government regulations in non-U.S. countries in which it conducts its business.

The Anti-Kickback Statute is subject to evolving interpretations. In the past, the U.S. government has enforced the Anti-Kickback Statute to reach large settlements with healthcare companies based on sham consulting and other financial arrangements with physicians. The majority of states in the U.S. also have anti-kickback laws which establish similar prohibitions, and in some cases may apply to items or services reimbursed by any third-party payor, including commercial insurers.

Additionally, violations of the False Claims Act can result in significant monetary penalties and treble damages. The federal government is using the False Claims Act, and the accompanying threat of significant financial liability, in its investigation and prosecution of device and biotechnology companies throughout the country, for example, in connection with the promotion of products for unapproved uses and other sales and marketing practices. The government has obtained multi-million and multi-billion USD settlements under the False Claims Act, in addition to individual criminal convictions under applicable criminal statutes. Given the significant size of actual and potential settlements, we anticipate that the government will continue to devote substantial resources to investigating healthcare providers' and manufacturers' compliance with applicable fraud and abuse laws.

HIPAA includes federal criminal statutes that prohibit, among other actions, knowingly and wilfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors; knowingly and wilfully embezzling or stealing from a healthcare benefit program; wilfully obstructing a criminal investigation of a healthcare offence; and knowingly and wilfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

There has also been a recent trend of increased federal and state regulation of payments made to physicians and other healthcare providers. The Affordable Care Act, among other things, imposes additional reporting requirements on certain device manufacturers for payments made by them to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Failure to submit required information may result in civil monetary penalties of up to an aggregate of $150,000 per year (or up to an aggregate of $1 million per year for "knowing failures"), for all payments, transfers of value, or ownership or investment interests that are not timely, accurately and completely reported in an annual submission. Device manufacturers must submit reports to the government by the 90th day of each calendar year. Certain states also mandate implementation of compliance programs, impose restrictions on device manufacturer marketing practices and/or require the tracking and reporting of gifts, compensation and other remuneration to physicians.

The shifting commercial compliance environment and the need to build and maintain robust systems to comply with different compliance and/or reporting requirements in multiple jurisdictions increase the possibility that a healthcare company may violate one or more of the requirements. If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to it, we may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of its operations, exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

Environmental Health and Safety Laws

We are also subject to various environmental health and safety laws and regulations worldwide. Like other medical device companies, our manufacturing and other operations involve the use and transportation of substances regulated under environmental health and safety laws including those related to the transportation of hazardous materials. To the best of our knowledge at this time, we do not expect that compliance with environmental protection laws will have a material impact on our consolidated results of operations, financial position or cash flows.

J. Working Capital Practices

Our goal is to carry sufficient levels of inventory to ensure adequate supply of raw materials from suppliers and meet the product delivery needs of our customers. To meet the operational demands of our customers, we also provide payment terms to customers in the normal course of business and rights to return product under warranty.

K. Employees

As of 31 December 2017, we employed more than 4,500 employees worldwide, inclusive of approximately 900 employed by our CRM business franchise, which is due to be divested in 2018. We have large populations of employees in Italy, France, Germany and the United States. Our employees are vital to our success, and we are engaged in an ongoing effort to identify, hire, manage and maintain the talent necessary to meet our business objectives. We believe that we have been successful in attracting and retaining qualified personnel in a highly competitive labour market due, in large part, to our competitive compensation and benefits and our rewarding work environment, fostering employee professional training and development and providing employees with opportunities to contribute to our continued growth and success.

As set out under "LivaNova's Strategy", our priorities are organized around four pillars, one of which is our Talent Pillar. Our employees are our most valuable asset, and the Talent Pillar guides our policies for developing this asset. We recruit world class talent with an Employment Value Proposition that focuses on our rich pipeline of business opportunities, the opportunities for our employees to grow and contribute to our future success, and the opportunities to serve the interests of society and our patients and caregivers who benefit from our innovative medical technology. For example, we provide an opportunity for our employees to serve the social interests of our patients and their caregivers by raising money through an independent, employee-operated charity, LivaNova Cares which defines a key aspect of our EVP.

We monitor the success of our recruitment efforts through tools we are developing as a part of the LivaNova Business System, including a Talent Acquisition Funnel Management tool. We are implementing a new human resources information system to support, among other things, use of a robust suite of talent analytics that will enable sharp focus on the continuous improvement of our talent acquisition success. We retain our employees through globally competitive compensation and benefits programs that include harmonizing policies through our Global Total Rewards Centre of Expertise; identifying top talent and high potential employees through performance development that differentiates performance and contribution to our success; working closely with our trade unions and works councils to ensure that we are inclusive of the interests of our workers in our policies and decisions; establishing retention incentives as a part of our change management programs in connection with reorganization of our business program model, acquisition of new businesses, and divestiture of our CRM business; monitoring employee engagement through our LivaNova4YOU engagement survey conducted in October 2017 and developing action plans based on the survey results to improve employee engagement; and implementing and regularly updating individual development plans for our employees and succession plans for our leadership.

We develop our talent through education and training. For example, we are developing and will launch in 2018 a Management Development Program to train our entry-level managers. In addition, we are also developing and are launching in 2018 a Leadership Development Program in collaboration with the London Business School for our senior leaders.

We have established policies and procedures to ensure the safety of our employees. We regularly train our employees on safety procedures and monitor for conditions and trends that undermine safety, and we utilize environmental management systems and safety programs to protect the environment and our employees. Some of the regulations and governmental agencies with which we comply include:

- The U.S. Environmental Protection Agency,
- The Occupational Health and Safety Assessment System,
- The European Union Registration, Evaluation, Authorization and Restriction of Chemicals,
- Italian regulations under the Integrated Environmental Authorization acts, and
- ISO 14001 certification.

We are committed to human rights and the adoption and pursuit of compliance with the United Nations Guiding Principles on Human Rights. Given the relatively early stage of our integration, our reorganization and the recent changes in our management structure, we have not conducted the due diligence required to confirm our compliance with Principles; however, we are confident that we are compliant or substantially compliant, with an intent to be fully compliant, with the Principles.

As a company that has existed for only 26 months, the last 12 of which has involved the recruitment of a new Chief Executive Officer, a new Chief Financial Officer and four new executives for our executive leadership team, our policies and procedures, including the LivaNova Business System, are still evolving. We do not yet have comprehensive analytics on the outcomes of our policies; however, we are keenly focused on the continued development and rapid deployment of our policies and procedures, and we believe that the improvement of our improved financial performance in 2017 demonstrates that our efforts to date have been successful.

We rely on non-disclosure and non-competition agreements with employees and other parties to protect, in part, trade secrets and other proprietary technology. There is a risk that these agreements will be breached, enabling our competitors to have access to our trade secrets and proprietary knowledge. We manage this risk through education, vigilance and layered controls on access to our trade secrets and proprietary information.

Our employees' failure to comply with rules relating to healthcare fraud and abuse, false claims and privacy and security laws may subject us to penalties and adversely impact our reputation and business operations. Our devices and therapies are subject to regulation regarding quality and cost by various governmental agencies worldwide responsible for coverage, reimbursement and regulation of healthcare goods and services. The principal laws implicated include:

- the Anti-Kickback Statute of the U.S. False Claims Act;
- U.S. federal civil and criminal false claims laws;
- the U.S. Civil Monetary Penalties Law;
- the U.S. Health Insurance Portability and Accountability Act;
- the U.S. Sunshine Act;
- the U.S. Foreign Corrupt Practices Act; and
- the UK Bribery Act.

We manage these risks by developing what we believe is a strong culture of compliance through regular and continuous training by our Compliance professionals, an anonymous system for reporting compliance violations, and adequate systems of internal controls, and we seek continuously to improve our systems of internal controls and to remedy any weaknesses identified.

The global medical technology industry is highly competitive, and we may be unable to compete effectively or retain the executives, engineers, scientists and other qualified employees we need to grow and remain competitive. We manage this risk through the talent acquisition, retention, and development efforts described above.

As at 31 December 2017:

- LivaNova had 9 members of its Board of Directors, of whom 7 (78%) were male and 2 (22%) were female

- LivaNova had 91 senior managers (consisting of the executive leadership team and vice-presidents), of whom 75 (82%) were male and 16 (18%) were female; and

- LivaNova had 4,574 employees, of whom 1,970 (43%) were male and 2,604 (57%) were female.

L. Environment and Other Social Matters

LivaNova is committed to conducting its business in compliance with all applicable environmental laws and regulations in a manner that has the highest regard for the environment and the health and safety, and well-being of employees and the general public. We report on scopes 1, 2 and 3 greenhouse gas emissions annually in our directors' report. We also report on the conflict minerals in our supply chain; this report is filed on Form SD with the SEC and is available both on *www.sec.gov* and our own website, *www.livanova.com*. In addition, we provide statements on our website in respect of the UK Modern Slavery Act and other transparency legislation which requires such publication.

M. Seasonality

For all product segments, the number of medical procedures incorporating our product sales is generally lower during the summer months due to summer vacation schedules. This is particularly relevant to European countries.

N. Properties

Our principal executive office is located in the UK and is leased by us. Our business franchises, corresponding to our main therapeutic areas: Neuromodulation and Cardiac Surgery have headquarters located in United States and Italy, respectively. The locations in Italy and United States are owned by us. Manufacturing and research facilities are located in Brazil, Canada, Germany, Italy, Australia

and the United States. Total facilities are approximately 1.3 million square feet. Approximately 25% of the manufacturing facilities are located within the United States and approximately 90% are owned by us and the balance is leased.

We also maintain 16 primary administrative offices in 12 countries. Most of these locations are leased. We are using substantially all of our currently available productive space to develop, manufacture, and market our products. Our facilities are in good operating condition, suitable for their respective uses, and adequate for current needs.

O. Anti-Bribery and Corruption

Our board of directors has adopted a Corporate Code of Business Conduct and Ethics for all executive officers and other employees, agents and representatives. This code was designed to deter wrongdoing and to promote honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships; full fair accurate, timely and understandable disclosure in reports and documents that we file with, or submit to, the US Securities and Exchange Commission and in other public communications made by us; compliance with applicable governmental laws, rules and regulations; the prompt internal reporting of violations of the code to an appropriate person or persons identified in the code; and accountability for adherence to the code. A copy of the code is available on our website at www.livanova.com. Any change to, or waiver from, the code will be disclosed as required by applicable securities laws.

In support of our objective to continuously improve our compliance culture and systems of control, in 2017 we undertook several measures to improve internal controls in respect of anti-corruption and anti-bribery compliance.

We established the foundation for our global compliance programme by creating and adopting our Compliance Policies and Procedures Playbook. The Playbook provides guidance and support as to our expectation for appropriate interactions with healthcare professionals, government officials and other third-party business partners and thereby mitigates the risk of violations of applicable anti-corruption and anti-bribery laws and regulations. The Playbook also aligns with our Code of Conduct and Business Ethics. The Playbook currently includes the following policies and procedures:

- Anti-Bribery and Anti-Corruption Master Policy
- Speak Up Policy and Procedure
- Compliance Transparency Reporting Policy
- Donations and Grants Policy and Procedure
- Consulting Agreements Policy and Procedure
- Interactions with Patient Groups and Patients Policy and Procedure
- Business Meals with HealthCare Professionals and Government Officials
- Gifts, Promotional Items, and Educational Items Policy
- LivaNova Events with Healthcare Professionals and Government Officials Policy and Procedure
- Evaluation and Demonstration Products Policy and Procedure
- Selection, Due Diligence and Engagement of Sales and Marketing Intermediaries Policy and Procedure
- Support for Conferences and other Third Party Organized Education Policy and Procedure

These policies also align with the self-regulated industry trade associations' codes of conduct, with which we voluntarily comply, including:

- the Advanced Medical Technology Association (AdvaMed) for USA and China,
- MedTech Europe,
- Asia Pacific Medical Technology Association (APACMed) and
- MecoMed for the member countries in Middle East and North Africa.

These policies were reviewed and approved by our corporate compliance committee comprised of our chief executive officer, chief compliance officer, chief administration officer, chief financial officer and general counsel.

Throughout 2017, we also improved the due diligence measures taken with regard to third-party agent and distributor business partners and merger and acquisition projects.

Pursuant to our Selection, Due Diligence and Engagement of Sales and Marketing Intermediaries Policy and Procedure, we conduct due diligence on all third-party distributors and agents prior to engaging them in a contractual relationship. The diligence process can take up to three months and can include up to six phases:

- Sales management submits a business justification for the new agent or distributor to the senior vice president of the applicable region.
- The potential agent or distributor completes a sales and marketing intermediary questionnaire, which focuses on all key risk areas of the business.
- The regional due diligence committee, which includes senior representatives from compliance, legal, finance, quality, regulatory, and commercial business teams, reviews the business justification and the related questionnaire for risks relevant to our business to ensure that our high standards of compliance will be observed by the potential agent or distributor.
- We engage a third-party vendor to conduct diligence on the potential agent or distributor covering key risk areas and the business and compliance reputation of the potential agent or distributor. This phase includes extended due diligence where necessary to obtain clarity on any findings described in the vendor's Due Diligence Report.
- The due diligence committee conducts a final review of the related due diligence report, with specific emphasis on the legal and compliance results.
- If the due diligence committee approves engagement of the agent or distributor, we execute an agency or distribution agreement.
- Our compliance professionals hold a seat on the due diligence team for all mergers and acquisitions to support oversight and diligence on anti-bribery and anti-corruption measures taken by the acquisition target.

With these policies and procedures, we have established firm foundation for our compliance programme, which strives to deliver consistency in approach, understanding, and execution of each employee's responsibility in managing compliance risk. The overall objective of our compliance programme, in addition to ensuring compliance with laws and regulations, is to support a strong and unified compliance culture.

Our compliance programme will continue to evolve in response to the ever-changing regulatory anti-corruption and anti-bribery environment in which we operate, our continued growth in key markets and the internal auditing and monitoring of this newly established program.

III. Business Review

A. Introduction

LivaNova is reporting in its consolidated financial statements in this UK Annual Report the results from operations for the years ended 31 December 2017 and 31 December 2016. The basis of presentation, critical accounting estimates and significant accounting policies are set forth in *Note 2* to the consolidated IFRS financial statements contained in this UK Annual Report. Additionally, LivaNova reported US GAAP financial statements for the years ended 31 December 2017 and 31 December 2016 in the Annual Report on Form 10-K filed with the SEC on 28 February 2018.

On 20 November 2017, we entered into a LOI to sell our CRM to MicroPort Scientific Corporation for $190.0 million in cash, and, on 8 March 2018, we entered into a definitive Purchase Agreement. Completion of the transaction is subject to receipt of relevant regulatory approvals, including fulfilling the requirements of the Hong Kong Stock Exchange's Major Transaction requirements, and other customary closing conditions. We expect the transaction to close in the second quarter of 2018. We concluded that the sale of CRM represents a strategic shift and therefore qualifies as a discontinued operation under IFRS. Accordingly, the operating results of the CRM business franchise are reflected as discontinued operations for all periods presented in this Annual Report and the related assets and liabilities are presented as held for sale as of 31 December 2017.

LivaNova reported operating income from continuing operations of $87.7 million on net sales of $1,012.3 million for the year ended 31 December 2017 and operating income from continuing operations of $19.3 million on net sales of $964.9 million for the year ended 31 December 2016. In the year ended 31 December 2017, LivaNova incurred $17.1 million of restructuring expenses and $15.5 million of merger and integration expenses. These items totalled $32.6 million and are included in exceptional items in the consolidated statements of income (loss). The year ended 31 December 2016 included $57.8 million in exceptional items, including restructuring expenses of $37.4 million and merger and integration expenses of $20.4 million.

B. Key Performance Indicators

The directors of LivaNova consider that the most important KPIs for 2017 are those set out below.

- **Net sales growth (on a constant currency basis, or adjusted net sales)**

Due to the number of currencies in which LivaNova's sales are invoiced to customers, the directors believe that constant currency sales growth is a more appropriate way to measure operational performance. Constant currency growth measures the change in sales between any particular year and the immediate prior year using average foreign exchange rates during the immediate prior year. Net sales include revenue earned from customers from sales of products and services net of customer discounts and estimated sales returns.

- **Adjusted income from continuing operations**

Income from operations, as adjusted for various costs arising from the Mergers (including those costs incurred as a result of purchase price accounting), measures LivaNova's management of sales, gross profit and normalized operating expenses.

- **Adjusted net income**

Net income, as adjusted for the items referred to above, and also adjusted for unusual costs from finance related matters, minority investments and accounting for taxation, measures the totality of LivaNova's income statement.

- **Adjusted earnings per share from continuing operations**

Earnings per share, as adjusted for the items referred to above, is a measure often used by investors to arrive at a value for each share issued by a company, including the dilutive effect of incentive shares issued to management.

An important KPI to be evaluated over a period longer than one year is the share price, which reflects not only the management of LivaNova's earnings on a consistent basis, but also management's ability to articulate medium and longer term strategy and communicate both of these to investors.

C. Results of Operations

Continuing Operations

LivaNova's continuing operations are comprised of two principal business franchises: Cardiac Surgery and Neuromodulation, corresponding to our main therapeutic areas. Corporate activities include corporate business development and New Ventures.

The 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 and mechanical heart valve replacements and repair products.

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

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

In this Annual Report, LivaNova and its consolidated subsidiaries report results for the years ended 31 December 2017 and 31 December 2016 as follows:

(In thousands, except per share amounts)	Year Ended 31 December 2017	Year Ended 31 December 2016
Net sales	$ 1,012,277	$ 964,858
Cost of sales	360,045	376,503
Exceptional items – product remediation	7,254	37,534
Gross profit	644,978	550,821
Operating expenses:		
Selling, general and administrative	409,749	384,751
Research and development	114,983	89,014
Operating profit before exceptional items	120,246	77,056
Exceptional items	32,584	57,754
Operating income from continuing operations	87,662	19,302
Finance income	1,318	1,698
Finance expense	(7,797)	(10,616)
Gain on acquisition of Caisson Interventional, LLC	39,428	—
Impairment of cost-method investments	(8,565)	—
Foreign exchange and other – gain	1,084	3,140
Share of losses from equity method investments	(16,719)	(18,679)
Income (loss) from continuing operations before tax	96,411	(5,155)
Income tax benefit (expense)	9,985	(78,126)
Income (loss) from continuing operations	106,396	(83,281)
Discontinued operations:		
Income (loss) from discontinued operations, net of tax	4,538	(111,325)
Impairment of discontinued operations, net of tax	(36,868)	—
Loss from discontinued operations	(32,330)	(111,325)
Income (loss) attributable to owners of the parent	$ 74,066	$ (194,606)

Net Sales

The table below illustrates net sales by operating segment for the years ended 31 December 2017 and 31 December 2016 (in thousands):

Revenues	Year Ended 31 December 2017	Year Ended 31 December 2016
Cardiac Surgery	$ 635,517	$ 611,715
Neuromodulation	374,976	351,406
Other	1,784	1,737
Total	$ 1,012,277	$ 964,858

Cardiac Surgery

Cardiac Surgery net sales increased $23.8 million, or 3.9%, for the year ended 31 December 2017, as compared to the year ended 31 December 2016 due primarily to growth of $22.9 million in cardiopulmonary product revenue. Cardiopulmonary product sales increased year over year due to continued progress towards upgrading customers from our S3 heart-lung machines to our current S5 device, strong sales of our Inspire oxygenator and favourable foreign currency exchange rate fluctuations. Heart valve sales increased by $0.9 million for the year ended 31 December 2017 as compared to the year ended 31 December 2016, due to favourable foreign currency exchange rate fluctuations, which more than offset continuing global declines in traditional tissue and mechanical heart valves.

Neuromodulation

Neuromodulation net sales increased $23.6 million, or 6.7%, for the year ended 31 December 2017 as compared to the prior year ended 31 December 2016 primarily due to strong demand for the AspireSR VNS Therapy System and the launch of the SenTiva VNS Therapy System in October 2017.

The table below illustrates net sales by market geography for the years ended 31 December 2017 and 31 December 2016 (in thousands):

	Year Ended 31 December 2017			
	Cardiac Surgery	Neuromodulation	Other	Total
United States	$ 177,805	$ 316,917	$ 2	$ 494,724
Europe[(1)]	175,705	34,765	—	210,470
Rest of world	282,007	23,294	1,782	307,083
Total	$ 635,517	$ 374,976	$ 1,784	$ 1,012,277

	Year Ended 31 December 2016			
	Cardiac Surgery	Neuromodulation	Other	Total
United States	$ 182,105	$ 298,453	$ —	$ 480,558
Europe[(1)]	172,772	31,942	132	204,846
Rest of world	256,838	21,011	1,605	279,454
Total	$ 611,715	$ 351,406	$ 1,737	$ 964,858

(1) Includes those countries in Europe where LivaNova has a direct sales presence. Countries where sales are made through distributors are included in Rest of world.

Cost of Sales and Expenses

The table below illustrates cost of sales and major expenses as a percentage of net sales:

	Year Ended 31 December 2017	Year Ended 31 December 2016
Cost of sales	35.6%	39.0%
Product remediation	0.7%	3.9%
Gross profit	63.7%	57.1%
Selling, general and administrative	40.5%	39.9%
Research and development	11.4%	9.2%
Exceptional items	3.2%	6.0%

Cost of Sales

Cost of sales as a percentage of net sales was 35.6% for the year ended 31 December 2017; a decrease of 3.4% compared to the year ended 31 December 2016. This decrease was primarily due to the decrease in amortization of inventory written-up in the Mergers related to the Cardiac Surgery Segment of $25.2 million, which accounted for 2.6% of net sales for the year ended 31 December 2016.

Product Remediation

During the years ended 31 December 2017 and 31 December 2016, we recognized expenses of $7.3 million and $37.5 million for a product remediation plan related to our 3T Heater Cooler device, representing 0.7% and 3.9% of net sales, respectively. Refer to *Note 19 — Provisions* in our consolidated financial statements included in this Annual Report for additional information.

SG&A Expenses

SG&A expenses are comprised of sales, marketing, general and administrative activities. SG&A expenses exclude expenses incurred in connection with the merger between Cyberonics and Sorin, integration costs after the Mergers and restructuring costs under the Restructuring Plans initiated after the Mergers.

SG&A expenses as a percentage of net sales for the year ended 31 December 2017 increased 0.6% to 40.5% as compared to the prior year ended 31 December 2016. This increase was largely attributable to litigation related to our 3T devices, costs associated with acquisitions and other legal matters.

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 as a percentage of net sales for the year ended 31 December 2017 increased by 2.2% to 11.4% as compared to the prior year ended 31 December 2016. The increase was primarily due to the acquisition of Caisson in May 2017, inclusive of $3.7 million in post-combination compensation expense recognized concurrent with the acquisition of Caisson, and $7.2 million in compensation expense associated with the retention of the employees of Caisson. The additional increase as compared to the prior year was due to increased investment in clinical and registries pertaining to TMVR and Heart Failure.

Exceptional Items

Items that are material either by size or incidence are classified as exceptional items. Further details on these items are included below.

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. In addition, integration expenses include retention bonuses, branding and renaming efforts and lease cancellation penalties in Milan and Brussels.

Merger and integration expenses as a percentage of net sales decreased to 1.5% for the year ended 31 December 2017 as compared to 2.1% for the year ended 31 December 2016 due to the continued decline in integration activities associated with the Mergers.

We reported these expenses as a part of Exceptional Items separately in the LivaNova's consolidated statements of income (loss).

Restructuring Expenses

Our 2015 and 2016 Reorganization Plans were initiated October 2015 and March 2016, respectively, in conjunction with the completion of the Mergers. The Plans included the Costa Rica manufacturing operation exit plan, initiated in December 2016 and completed during 2017, and the Suzhou, China exit plan, initiated in March 2017. The Plans leverage economies of scale, eliminate duplicate corporate expenses and streamline distributions, logistics and office functions in order to reduce overall costs. Restructuring expenses are detailed in "Note 8. Restructuring Plans" in the consolidated financial statements in this Annual Report.

Restructuring expenses as a percentage of net sales decreased to 1.7% from 3.9% for the year ended 31 December 2017 as compared to the year ended 31 December 2016 as our restructuring activities declined and continue to decline.

Interest Expense

We incurred interest expense of $7.8 million for the year ended 31 December 2017, as compared to $10.6 million for the year ended 31 December 2016. The decrease was primarily due a reduction in income tax related interest expense for our inter-company sale of intellectual property for the year ended 31 December 2017, as compared to the prior year as a result of a reduction in the income tax liability.

Gain on Caisson Acquisition

On 2 May 2017, we acquired the remaining 51% equity interests in Caisson, which we previously accounted for under the equity method. On the acquisition date, we remeasured our notes receivable due from Caisson and our existing investment in Caisson at fair value and recognized a pre-tax non-cash gain of $1.3 million and $38.1 million, respectively.

Impairment of Cost-Method Investments

During December 2017, we impaired our cost-method investments in Respicardia and Rainbow Medical, in the amounts of $5.5 million and $3.0 million, respectively. Refer to Note 11 - Investments in Associates, Joint Ventures and Subsidiaries in our consolidated financial statements included in this Annual Report for additional information.

Foreign Exchange and Other

Due to the global nature of our continuing operations, we are exposed to foreign currency exchange rate fluctuations. Foreign exchange and other gains were $1.1 million for the year ended 31 December 2017, consisting of net FX losses of $2.1 million associated with intercompany debt and third-party financial assets and liabilities denominated in foreign currencies, net of the impact of foreign currency derivative contracts established to hedge against exchange rate movements, offset by a $3.2 million gain on a sale of the cost-method investment, Istituto Europeo di Oncologia S.R.L.

Foreign Exchange and Other consisted of net FX gains of $3.1 million for the year ended 31 December 2016, primarily the result of our inter-company financing arrangements, and third-party financial assets and liabilities denominated in foreign currencies, net of the impact of foreign currency derivative contracts established to hedge against exchange rate movements.

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 years ended 31 December 2017 and 31 December 2016, we recorded income tax benefit (expense) from continuing operations of $10.0 million and $(78.1) million, respectively, with effective income tax rates of (10.4)% and (1,515.5)%, respectively.

Our (10.4)% effective income tax rate for the year ended 31 December 2017 included the impact of various discrete tax items, including the non-cash net benefit of $16.0 million recorded as a result of the U.S. Tax Cuts and Jobs Act and the acquisition of Caisson, inclusive of the $38.1 million non-taxable gain recognized to re-measure our existing equity investments in Caisson at fair value on the acquisition date.

Our (1,515.5)% effective income tax rate for the year ended 31 December 2016 included the impact of various discrete tax items, primarily related to the gain recognized with the consolidation of our intellectual property into an entity organized under the laws of England and Wales, operational income earned in jurisdictions with a higher tax rate than England and Wales, and taxation on distributions.

U.S. Tax Reform

On 22 December 2017, the U.S. enacted the Tax Cuts and Jobs Act. The Act, 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. We recorded no toll charge for the year ended 31 December 2017 as we had no previously deferred foreign earnings of U.S. controlled foreign subsidiaries as of the measurement dates. As a result of the Act, we recorded a non-cash net benefit of $16.0 million during the fourth quarter of 2017, which is included in "Income tax (benefit) expense" in the consolidated statements of (loss) income. This amount primarily consists of two components: (i) $12.8 million relating to de-recognition of foreign tax credits, and (ii) a net benefit of $28.8 million resulting from the remeasurement of our deferred tax assets and liabilities in the U.S. based on a change in the corporate income tax rate.

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 (2) the creation of the base erosion anti-abuse tax, a new minimum tax; (3) a new provision designed to tax global intangible low-taxed income; (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 generated after 31 December 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 net benefit of $16.0 million is a reasonable estimate of the impact of the income tax effects of the Act on us as of 31 December 2017, 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 23 June 2016, the UK held a referendum in which voters approved an exit from the EU, commonly referred to as "Brexit." On 29 March 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. The withdrawal must occur within two years, unless the deadline is extended. 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 relief 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 relief 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 relief 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 26 October 2017, the European Commission announced that an investigation will be opened with respect to the UK's controlled foreign company 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 finalised 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.

Equity Method Investments

Losses from equity method investments were $16.7 million during the year ended 31 December 2017 were due to investee losses of Highlife and Caisson and the impairment of our investment in, and notes receivable from Highlife of $13.0 million; consisting of an investment impairment of $4.7 million and a notes receivable impairment of $8.3 million. In May 2017, we acquired the remaining equity interests in Caisson and we began consolidating the results of Caisson as of the acquisition date.

We recognized equity method losses of $18.7 million for the year ended 31 December 2016 due to investee losses of Caisson, Highlife, Microport and Respicardia and the impairment of our investment in Respicardia of $9.2 million. In November 2016, we terminated our distributor agreement with Respicardia. The distributor agreement had been a key component in the determination of whether our influence over Respicardia was significant, and as a result, we determined that we no longer had significant influence over Respicardia and transferred the investment to our cost method investments.

Discontinued Operations

On 20 November 2017, we entered into a LOI to sell our CRM to MicroPort Scientific Corporation for $190.0 million in cash, and, on 8 March 2018, we entered into a definitive Purchase Agreement. Completion of the transaction is subject to receipt of relevant regulatory approvals, including fulfilling the requirements of the Hong Kong Stock Exchange's Major Transaction requirements, and other customary closing conditions. We expect the transaction to close in the second quarter of 2018. We concluded that the sale of CRM represents a strategic shift and therefore qualifies as a discontinued operation under IFRS. Accordingly, the operating results of the CRM business franchise are reflected as discontinued operations for all periods presented in this Annual Report and the related assets and liabilities are presented as held for sale as of 31 December 2017.

Additionally, we tested the long-lived assets of CRM for impairment and recognized an impairment to tangible and intangible assets of $36.9 million, net of a $8.0 million tax benefit. The assets and liabilities of CRM are classified as assets (or liabilities) of discontinued operations on the consolidated balance sheets at 31 December 2017 in this Annual Report.

The table below illustrates the results of discontinued operations (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Discontinued Operations:		
Income (loss from discontinued operations, net of tax	$ 4,538	$ (111,325)
Impairment of discontinued operations, net of tax	(36,868)	—
Net loss from discontinued operations	$ (32,330)	$ (111,325)

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 resynchronisation therapy devices and low-voltage pacemakers. CRM has approximately 900 employees, with operations in Clamart, France; Saluggia, Italy; and Santo Domingo, Dominican Republic.

D. Liquidity and Capital Resources

Based on our current business plan, we believe that our existing cash and cash equivalents and future cash generated from operations 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.

Cash Flows

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

	Year Ended 31 December 2017	Year Ended 31 December 2016
Operating activities	$ 91,339	$ 90,152
Investing activities	(52,855)	(44,516)
Financing activities	11,294	(118,040)
Effect of exchange rate changes on cash and cash equivalents	4,048	(420)
Net increase (decrease) in cash and cash equivalents	$ 53,826	$ (72,824)

Operating Activities

Cash provided by operating activities for the year ended 31 December 2017 was $91.3 million, primarily due to net income of $74.1 million along with adjustments to net income of $165.5 million for non-cash items, which included depreciation and amortization of $78.5 million and a non-cash loss of $44.9 million related to the impairment of tangible and intangible assets of our discontinued operations, offset by utilization of cash for operating assets and liabilities of $101.7 million.

Cash provided by operating activities for the year ended 31 December 2016 was $90.2 million, primarily due to a net loss of $194.6 million offset by $334.3 million of non-cash items. Non-cash items were principally composed of $88.8 million in depreciation and amortization, a $72.3 million impairment of CRM and $27.1 million in stock-based compensation.

Investing Activities

Cash used in investing activities was $52.9 million during the year ended 31 December 2017. We invested $34.1 million in property, plant and equipment. We also utilized cash of $27.9 million related to our investments in privately held medical start-up companies, which included the purchase of the 51% of the remaining interest in Caisson utilizing cash of $14.2 million, and investments in, and loans to, our equity and cost method investees of $13.7 million.

Cash used in investing activities was $44.5 million during the year ended 31 December 2016, primarily due to $38.4 million invested in property, plant and equipment and investments in, and loans to, our equity and cost method investees of $14.3 million. These amounts were partially offset by the transfer of $7.0 million to cash and cash equivalents from short-term investments.

Financing Activities

Cash used in financing activities during the year ended 31 December 2017 was $11.3 million, which includes $32.4 million in borrowings under our revolving credit facilities and repayment of long-term debt of $22.8 million. We also borrowed $2.0 million in additional long-term debt.

Cash used in financing activities during the year ended 31 December 2016 was $118.0 million, which includes $54.5 million to re-purchase shares, a $33.7 million reduction in revolving credit facilities, repayment of advances on customer receivables of $23.8 million and repayment of long-term debt of $21.1 million. We also borrowed $7.2 million in additional long-term debt.

Debt and Capital

Our capital structure consists of debt and equity. As of 31 December 2017 total debt of $146.0 million was 8.0% of total equity of $1.8 billion.

Debt

During the year ended 31 December 2017, we increased our outstanding revolving credit facilities by $32.4 million, repaid $22.8 million of long-term debt obligations and borrowed $2.0 million in additional long-term debt.

During the year ended 31 December 2016, we reduced our outstanding revolving credit facilities by $33.7 million, repaid $21.1 million of long-term debt obligations and borrowed $7.2 million in additional long-term debt.

Factoring

During the year ended 31 December 2016, LivaNova reduced the obligation for advances on customer receivables by $24.5 million, thereby eliminating this form of financing.

Contractual Obligations

We have various contractual commitments that we expect to fund from existing cash, future operating cash flows and borrowings under our revolving credit facilities. The actual timing of the clinical commitment payments may vary based on the completion of milestones which are beyond our control. The following table summarises our significant contractual obligations as of 31 December 2017 and the periods in which such obligations are due (in thousands):

	Less Than One Year	One to Three Years	Three to Five Years	Thereafter	Total Contractual Obligations
Principle payments on short-term debt	$ 58,190	$ —	$ —	$ —	$ 58,190
Principle payments on long-term debt	25,844	46,793	12,689	2,476	87,802
Interest payments on long-term debt	788	848	161	19	1,816
Operating leases	13,584	21,198	12,917	24,632	72,331
Caisson deferred consideration	14,300	—	—	—	14,300
Inventory supply contract obligations	2,136	22,678	—	—	24,814
Derivative instruments	1,294	719	32	—	2,045
Other commitments	588	16	—	502	1,106
Total contractual obligations[1]	$ 116,724	$ 92,252	$ 25,799	$ 27,629	$ 262,404

We have other commitments that we are contractually obligated to fulfil with cash under certain circumstances. These commitments include letters of credit to guarantee our performance as it relates to our contract bidding, VAT tax, tax appeals, and other obligations in various jurisdictions. Obligations under these guarantees are not normally called, as we typically comply with underlying performance requirements. As of 31 December 2017, no liability has been recorded in the financial statements associated with these obligations.

The following table summaries our guarantees as of 31 December 2017 (in thousands):

	Less Than One Year	One to Three Years	Three to Five Years	Thereafter	Total Contractual Obligations
Guarantees on governmental bids[1]	$ 17,574	$ 8,193	$ 5,431	$ 863	$ 32,061
Guarantees - commercial[2]	962	3,165	29	481	4,637
Guarantees to tax authorities[3]	242	1,291	10,833	—	12,366
Guarantees to third-parties[4]	—	—	—	153	153
Total guarantees	$ 18,778	$ 12,649	$ 16,293	$ 1,497	$ 49,217

(1) Government bid guarantees include such items as unconditional bank guarantees, irrevocable letters of credit and bid bonds.
(2) Commercial guarantees include our lease and tenancy guarantees.
(3) The guarantees to the governmental tax authorities consist primarily of the guarantee issued to the Italian VAT Authority.
(4) Guarantees to third-parties consist primarily of irrevocable letters of credit and tenancy guarantees.

E. Quantitative and Qualitative Disclosures about Market Risk

LivaNova is exposed to certain market risks as part of its on-going business operations, including risks from foreign currency exchange rates, interest rate risks and concentration of procurement suppliers that could adversely affect LivaNova's consolidated balance sheet, income statement and cash flow. LivaNova manages these risks through regular operating and financing activities and, at certain times, derivative financial instruments.

Foreign Currency Exchange Rate Risk

Due to the global nature of LivaNova's operations, it is exposed to foreign currency exchange rate fluctuations. LivaNova maintains a foreign currency exchange rate risk management strategy that utilizes derivatives to reduce LivaNova's exposure to unanticipated fluctuations in forecast revenue and costs and fair values of debt, inter-company debt and accounts receivables caused by changes in foreign currency exchange rates.

LivaNova mitigates its credit risk relating to counter-parties of LivaNova's derivatives through a variety of techniques, including transacting with multiple, high-quality financial institutions, thereby limiting LivaNova's exposure to individual counter-parties and by entering into International Swaps and Derivatives Association, Inc. Master Agreements, which include provisions for a legally enforceable master netting agreement, with almost all of LivaNova's derivative counter-parties. The terms of the ISDA agreements may also include credit support requirements, cross default provisions, termination events, or set-off provisions. Legally enforceable master netting agreements reduce credit risk by providing protection in bankruptcy in certain circumstances and generally permitting the closeout and netting of transactions with the same counter-party upon the occurrence of certain events.

Based on our exposure to foreign currency exchange rate risk, a sensitivity analysis indicates that if the USD had uniformly strengthened by 10% against the GBP and the Japanese Yen, in the year ended 31 December 2017, the effect on our unrealised income, for our derivatives outstanding at 31 December 2017, would have been approximately $6.0 million; if the USD had uniformly weakened by 10% against same currencies, the effect on our unrealized expenses, for our derivatives outstanding at 31 December 2017, would have been approximately $7.3 million. We did not engage in derivative contracts prior to the Mergers.

Any gains or losses on the fair value of derivative contracts would generally be offset by gains and losses on the underlying transactions. These offsetting gains and losses are not reflected in the above analysis.

If LivaNova was to incur a hypothetical 10 per cent adverse change in foreign currency exchange rates, net unrealized losses associated with LivaNova's foreign currency denominated assets and liabilities as of 31 December 2017, net of LivaNova's hedging would not be material to LivaNova's consolidated balance sheet or consolidated statements of income (loss).

Interest Rate Risk

LivaNova is subject to interest rate risk on its investments and debt. LivaNova manages a portion of its interest rate risk with contracts that swap floating-rate interest payments for fixed rate interest payments. If interest rates were to increase or decrease by 0.5 percent, the effects on LivaNova's consolidated income statement would not be material.

Concentration of Credit Risk

LivaNova's trade accounts receivable represents potential concentrations of credit risk. This risk is limited due to the large number of customers and their dispersion across a number of geographic areas, as well as LivaNova's efforts to control its exposure to credit risk by monitoring its receivables and the use of credit approvals and credit limits. In addition, LivaNova has historically had strong collections and minimal write-offs. Whilst the Company believes that LivaNova's reserves for credit losses are adequate, essentially all of LivaNova's trade receivables are concentrated in the hospital and healthcare sectors worldwide and, accordingly, LivaNova is exposed to their respective businesses, economic and country-specific variables. Although the Company does not currently foresee a concentrated credit risk associated with these receivables, repayment is dependent on the financial stability of these industry sectors and their respective countries' national economies and healthcare systems.

IV. Principal Risks and Uncertainties

Our business and assets are subject to varying degrees of risk and uncertainty. An investor should carefully consider the risks described below, as well as other information contained in this Annual Report and in our other filings with the SEC. Based on the information currently known to us, we believe the following information identifies the most significant risk factors affecting us, but the below risks and uncertainties are not the only ones related to our businesses and are not necessarily listed in the order of their significance. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

Global healthcare policy changes, including U.S. healthcare reform legislation, may have a material adverse effect on us.

In response to perceived increases in healthcare costs, there have been and continue to be proposals by governments, regulators and third-party payers to control these costs. The adoption of some or all of these proposals could have a material adverse effect on our

financial position and results of operations. These proposals have resulted in efforts to enact U.S. healthcare system reforms that may lead to pricing restrictions, limits on the amounts of reimbursement available for our products and could limit the acceptance and availability of our products.

In the United States, the federal government enacted legislation, including the Affordable Care Act of 2010, to overhaul the nation's healthcare system. Among other things, the Affordable Care Act imposes an annual excise tax of 2.3% on any entity that manufactures or imports medical devices offered for sale in the United States. Due to subsequent legislative amendments, the excise tax has been suspended for the period 1 January 2016 to 31 December 2019, and absent further legislative action, will be reinstated starting 1 January 2020. It also implements payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models.

The Affordable Care Act also focuses on a number of Medicare provisions aimed at decreasing costs. It is uncertain at this point what unintended consequences these provisions will have on patient access to new technologies. The Medicare provisions include value-based payment programs, increased funding of comparative effectiveness research, reduced hospital payments for avoidable readmissions and hospital-acquired conditions, and pilot programs to evaluate alternative payment methodologies that promote care coordination (such as bundled physician and hospital payments). Additionally, the law includes a reduction in the annual rate of inflation for hospitals that began in 2011 and the establishment of an independent payment advisory board to recommend ways of reducing the rate of growth in Medicare spending beginning in 2014. We cannot predict what healthcare programs and regulations will be implemented at the global level or the U.S. federal or state level, or the effect of any future legislation or regulation; however, any changes that lower reimbursement for our products or reduce medical procedure volumes could adversely affect our business and results of operations

In 2015, the Italian Parliament introduced new rules for entities that supply goods and services to the Italian National Healthcare System. This healthcare law impacts the business and financial reporting of medical technology sector companies that sell medical devices in Italy. A key provision of the law is a 'payback' measure, requiring companies selling medical devices in Italy to make payments to the Italian state if medical device expenditures exceed regional maximum ceilings. Companies are required to make payments equal to a percentage of expenditures exceeding maximum regional caps. There is still considerable uncertainty about how the law will operate and what the exact timeline will be for finalization. Our current assessment of the Italian Medical Device Payback legislation involves significant judgement regarding the expected scope and actual implementation terms of the measure as the latter have not been clarified to date by Italian authorities. We account for the estimated cost of the Medical Device Payback as a deduction from revenue.

The success and continuing development of our products depend on maintaining strong relationships with physicians and healthcare professionals.

If we fail to maintain our working relationships with physicians, our products may not be developed and marketed in line with the needs and expectations of the professionals who use and support our products. Physicians assist us as researchers, marketing consultants, product consultants, inventors and public speakers, and we rely on these professionals to provide us with considerable knowledge and experience. If we are unable to maintain these strong relationships, the development and marketing of our products could suffer, which could have a material adverse effect on our consolidated financial condition and results of operations.

We may be unable to obtain and maintain adequate third-party reimbursement on our products, which could have a significant negative impact on our future operating results

Our ability to commercialize our products is dependent, in large part, on whether third-party payors, including private healthcare insurers, managed care plans, governmental programs and others agree to cover the costs and services associated with our products and related procedures in the United States and internationally.

Our products are purchased principally by healthcare providers that typically bill various third-party payors, such as governmental programs (e.g., Medicare and Medicaid in the United States) and private insurance plans for the healthcare services provided to their patients. The ability of customers to obtain appropriate reimbursement for their services and the products they provide is critical to the success of medical technology companies. The availability of adequate reimbursement affects the decision as to which procedures are performed, which products are purchased and what prices customers are willing to pay. After we develop a promising new product, we may find limited demand for the product if reimbursement approval is not obtained from private and governmental third-party payors. In addition, periodic changes to reimbursement methodologies could have an adverse impact on our business.

Outside the United States, reimbursement systems vary significantly by country. Many foreign markets have government-managed healthcare systems that govern reimbursement for medical devices and procedures. Additionally, some foreign reimbursement systems provide for limited payments in a given period and, as a consequence, result in extended payment periods. If adequate levels of reimbursement from third‑party payors outside of the United States are not obtained, international sales of our products may decline.

Patient confidentiality and federal and state privacy and security laws and regulations in the United States and around the world may adversely impact our selling model.

U.S. HIPAA establishes federal rules protecting the privacy and security of personal health information. The privacy and security rules address the use and disclosure of individual healthcare information and the rights of patients to understand and control how such information is used and disclosed. HIPAA provides both civil and criminal fines and penalties for covered entities or business associates that fail to comply. If we fail to comply with the applicable regulations, we could suffer civil penalties up to or exceeding $50,000 per violation, with a maximum of $1.5 million for multiple violations of an identical requirement during a calendar year and criminal penalties with fines up to $250,000 and potential imprisonment.

In addition to HIPAA, virtually every U.S. state has enacted one or more laws to safeguard privacy, and these laws vary significantly from state to state and change frequently. Because the operation of our business involves the collection and use of substantial amounts of "protected health information," we endeavour to conduct our business as a "covered entity" under HIPAA, and consistent with state privacy laws, we obtain HIPAA-compliant patient authorisations where required to support our use and disclosure of patient information. We also sometimes act as a "business associate" for a covered entity. Regardless, the Office for Civil Rights of the Department of Health and Human Services or another government enforcement agency may determine that our business model or operations are not in compliance with HIPAA or other related state laws, which could subject us to penalties, severely limit our ability to market and sell our products under our existing business model and harm our business growth and consolidated financial position.

The EU's GDPR, in force from 25 May 2018, protects the privacy and security of personal health information relating to individuals within the EU. Like HIPAA, GDPR addresses the use and disclosure of individual healthcare information and the rights of patients to understand and control how such information is used and disclosed. It will also subject us to a rigorous pro-active compliance regime. If we fail to comply with GDPR, we could be sued for compensation by individuals who have suffered material or non-material damage and could suffer administrative "effective, proportionate and dissuasive" administrative fines up to the higher of €20 million, or 4%, of the total worldwide annual turnover of the group in the previous financial year. We may also be subject to criminal sanctions.

Cyber-attacks or other disruptions to our information technology systems could lead to reduced revenue, increased costs, liability claims, fines or harm to our competitive position.

We are increasingly dependent on sophisticated information technology systems to operate our business, and certain of our products include integrated software and information technology. We rely on information technology systems to collect and process customer orders, manage product manufacturing and shipping, and support regulatory compliance, and we routinely process, store, and transmit large amounts of data, including sensitive personal information, protected health information, and business information. Many of our products incorporate software and information technology that allow patients and physicians to be connected and collect data regarding a patient and the therapy he or she is receiving, or that otherwise allow the products or services to operate as intended. We could experience attempted or actual interference with the integrity of, and interruptions in, our technology systems, as well as data breaches. We could also experience attempted or actual interference with the integrity of our products and data. These incidents could materially harm our business and our reputation.

As is the case with other large enterprises, the size and complexity of our products and information technology systems can make them vulnerable to cyber-attacks, breakdown, interruptions, destruction, loss or compromise of data, obsolescence or incompatibility among systems, or other significant disruptions. Unauthorized persons routinely attempt to access our products or systems in order to disrupt, disable or degrade such products or services, or to obtain proprietary or confidential information. Such unauthorized access or interference with our products or services, if successful, could create issues with product functionality, which could pose a risk to patient safety, and a risk of product recall or field activity.

We have programs, processes and technologies in place to attempt to prevent, detect, contain, respond to and mitigate security-related threats and potential incidents. We undertake ongoing improvements to our systems, connected devices and information-sharing products in order to minimize vulnerabilities, in accordance with industry and regulatory standards; however, because the techniques used to obtain unauthorized access change frequently and can be difficult to detect, and because the integration of two global cross-border companies takes time and entails risks pertaining to the integration of disparate information technology systems. anticipating,

identifying or preventing these intrusions or mitigating them if and when they occur is challenging and makes us more vulnerable to cyber-attacks than other companies not similarly situated.

We also rely on third-party vendors to supply and/or support certain aspects of our information technology systems. Third-party systems may contain defects in design or manufacture or other problems that could result in system disruption or could unexpectedly compromise the information security of our own systems, and we are dependent on these third parties to provide reliable systems and software and to deploy appropriate security programs to protect their systems.

In addition, we continue to grow in part through new business acquisitions. As a result of acquisitions, we may face risks due to implementation, modification, or remediation of controls, procedures, and policies relating to data privacy and cybersecurity at the acquired company. We continue to consolidate and over time integrate the number of systems we operate, and to upgrade and expand our information system capabilities for stable and secure business operations.

If we are unable to maintain secure, reliable information technology systems and prevent disruptions, outages, or data breaches, we may suffer regulatory consequences in addition to business consequences. Our worldwide operations mean that we are subject to laws and regulations, including data protection and cyber-security laws and regulations, in many jurisdictions. For example, if we are in breach of the GDPR's requirement that we ensure a level of security, both in terms of technology and other organizational measures, appropriate to the risk that the confidentiality, integrity or availability of personally identifiable data is compromised, we could be subject to fines of up to €10 million or 2% of our annual worldwide group turnover, whichever is higher. Despite programs to comply with such laws and regulations, there is no guarantee that we will avoid enforcement actions by governmental bodies. Enforcement actions may be costly and interrupt regular operations of our business. In addition, there is a trend of civil lawsuits and class actions relating to breaches of consumer data other cyber-attacks. While we have not been named in any such lawsuits, if a substantial breach or loss of data occurs, we could become a target of civil litigation or government enforcement actions. Our information technology systems require an ongoing commitment of significant resources to maintain, protect, and enhance existing systems and to develop new systems to keep pace with continuing changes in information processing technology, evolving legal and regulatory standards, the increasing need to protect patient and customer information, and the information technology needs associated with our changing products and services. There can be no assurance that our process of consolidating, protecting, upgrading and expanding our systems and capabilities, continuing to build security into the design of our products, and developing new systems to keep pace with continuing changes in information processing technology will be successful or that additional systems issues will not arise in the future. Any significant breakdown, intrusion, interruption, corruption, or destruction of these systems, as well as any data breaches, could have a material adverse effect on our business. If our information technology systems, products or sensitive data are compromised, patients or employees could be exposed to financial or medical identity theft or suffer a loss of product functionality, and we could lose existing customers, have difficulty attracting new customers, have difficulty preventing, detecting, and controlling fraud, be exposed to the loss or misuse of confidential information, have disputes with customers, physicians, and other health care professionals, suffer regulatory sanctions or penalties under federal laws, state laws, or the laws of other jurisdictions, experience increases in operating expenses or an impairment in our ability to conduct our operations, incur expenses or lose revenues as a result of a data privacy breach, product failure, information technology outages or disruptions, or suffer other adverse consequences including lawsuits or other legal action and damage to our reputation.

We are subject to extensive and dynamic medical device regulation, which may impede or hinder the approval or sale of our products and in some cases, may ultimately result in an inability to obtain approval of certain products or may result in the recall or seizure of previously approved products.

Our medical device products and operations are subject to extensive regulation by the FDA and various other federal, state and foreign government authorities. Government regulation of medical devices is meant to assure their safety and effectiveness and includes regulation of, among other things, design, development and manufacturing; clinical studies; product safety; pre-market clearance and approval; marketing, sales and distribution; reimbursement; and post-market surveillance. The pathway to obtaining clearance from the FDA and comparable agencies in foreign countries for new products is described above in "Item 1. Business - Government Regulation and Other Considerations." Such processes can take a significant amount of time; require the expenditure of substantial resources; involve rigorous pre-clinical and clinical testing, as well as increased post-market surveillance; require changes to products; and result in limitations on the indicated uses of products.

In addition, exported devices are subject to the regulatory requirements of each country to which the device is exported. Some countries do not have medical device regulations, but in most foreign countries, medical devices are regulated. Frequently, regulatory approval may first be obtained in a foreign country prior to application in the U.S. due to differing regulatory requirements; however, other countries, such as China, for example, require approval in the country of origin or legal manufacturer as a condition for approval in that country. Most countries outside of the U.S. require that product approvals be renewed or recertified on a regular basis, generally every four to five years. The renewal or recertification process requires that we evaluate any device changes and any new regulations

or standards relevant to the device and conduct appropriate testing to document continued compliance. Where renewal or recertification applications are required, they may need to be renewed and/or approved in order to continue selling our products in those countries. There can be no assurance that we will receive the required approvals for new products or modifications to existing products on a timely basis or that any approval will not be subsequently withdrawn or conditioned upon extensive post-market study requirements.

Our global regulatory environment is becoming increasingly stringent, and unpredictable, which could increase the time, cost and complexity of obtaining regulatory approvals for our products, as well as the clinical and regulatory costs of supporting those approvals. Several countries that did not have regulatory requirements for medical devices have established such requirements in recent years and other countries have expanded on existing regulations. Certain regulators are exhibiting less flexibility and are requiring local preclinical and clinical data in addition to global data. While harmonization of global regulations has been pursued, requirements continue to differ significantly among countries. We expect this global regulatory environment will continue to evolve, which could impact our ability to obtain future approvals for our products, or could increase the cost and time to obtain such approvals in the future.

The FDA and other worldwide regulatory agencies actively monitor compliance with local laws and regulations through review and inspection of design and manufacturing practices, recordkeeping, reporting of adverse events, labelling and promotional practices. The FDA can ban certain medical devices; detain or seize adulterated or misbranded medical devices; order repair, replacement or refund of these devices; and require notification of health professionals and others with regard to medical devices that present unreasonable risks of substantial harm to the public health. The FDA can take action against a company that promotes "off-label" uses. Any adverse regulatory action, depending on its magnitude, may restrict a company from effectively marketing and selling its products, may limit a company's ability to obtain future premarket clearances or approvals, and could result in a substantial modification to the company's business practices and operations. International sales of U.S. manufactured medical devices that are not approved by the FDA for use in the U.S., or that are banned or deviate from lawful performance standards, are subject to FDA export requirements.

Regulations regarding the development, manufacture and sale of medical devices are evolving and subject to future change. We cannot predict what impact, if any, those changes might have on our business. Failure to comply with regulatory requirements could have a material adverse effect on our business, financial condition and results of operations. Later discovery of previously unknown problems with a product or manufacturer could result in fines, delays or suspensions of regulatory clearances or approvals, seizures or recalls of products, physician advisories or other field actions, operating restrictions and/or criminal prosecution. We may also initiate field actions as a result of a failure to strictly comply with our internal quality policies. The failure to receive product approval clearance on a timely basis, suspensions of regulatory clearances, seizures or recalls of products, physician advisories or other field actions, or the withdrawal of product approval by the FDA or by comparable agencies in foreign countries could have a material adverse effect on our business, financial condition or results of operations.

Modifications to our marketed products may require new clearances or approvals, and may require us to cease marketing or recall the modified products until required clearances or approvals are obtained.

An element of our strategy is to continue to upgrade our products, add new features and expand clearance or approval of our current products to new indications. In the United States, any modification to a PMA-approved device generally requires an additional approval by the FDA. Similarly, any modification to a 510(k)-cleared device that could significantly affect its safety or efficacy, or that would constitute a major change in its intended use, technology, materials, packaging and certain manufacturing processes, may require a new 510(k) clearance or, possibly, PMA approval. The FDA requires every manufacturer to make the determination regarding the need for a new 510(k) clearance or PMA approval in the first instance; but the FDA may (and often does) review the manufacturer's decision, and, where the FDA does not agree, may retroactively require the manufacturer to submit a 510(k) or PMA, and may require a recall of the affected device until clearance or approval is obtained. We have made modifications to our products in the past and may make additional modifications in the future that we believe do not or will not require additional clearances or approvals. No assurance can be given that the FDA will agree with any of our decisions not to seek 510(k) clearance or PMA approval.

If the FDA requires us to cease marketing and to recall a modified device until we obtains a new 510(k) clearance or PMA approval, our business, financial condition, operating results and future growth prospects could be materially adversely affected. Any recall or FDA requirement that we seek additional clearances or approvals could result in significant delays, fines, increased costs associated with modification of a product, loss of revenue and potential operating restrictions imposed by the FDA.

Furthermore, the FDA's ongoing review of the 510(k) clearance process may make it more difficult for us to make modifications to our previously cleared products, either by imposing stricter requirements as to when a new 510(k) notification for a modification to a previously cleared product must be submitted, or by applying more onerous review criteria to such submissions.

If our marketed medical devices are defective or otherwise pose safety risks, the FDA and similar foreign governmental authorities could require their recall, or we may initiate a recall of our products voluntarily.

The FDA and similar foreign governmental authorities may require the recall of commercialised products in the event of material deficiencies or defects in design or manufacture or in the event that a product poses an unacceptable risk to health. Manufacturers, on their own initiative, may recall a product with material deficiency. We have initiated voluntary product recalls in the past. A future recall announcement in the United States, EEA or elsewhere could harm our reputation with customers and negatively affect our revenue.

A government-mandated recall or voluntary recall by us or one of our sales agencies could occur as a result of an unacceptable risk to health, component failures, manufacturing errors, design or labelling defects or other deficiencies or issues. Recalls of any of our products would divert managerial and financial resources and have an adverse effect on our financial condition and operating results. Any recall could impair our ability to produce our products in a cost-effective and timely manner in order to meet our customers' demands. We also may be required to bear other costs or take other actions that may have a negative impact on our future revenue and our ability to generate profits. In the future, we may initiate voluntary withdrawal, removal or repair actions that we determine do not require notification of the FDA as a recall. If the FDA disagrees with our determinations, it could require us to report those actions as recalls. In addition, the FDA could take enforcement action for failing to report the recalls when they were conducted.

In addition, depending on the corrective action we take to redress a device's deficiencies or defects, the FDA may require, or we may decide, that we need to obtain new approvals or clearances for the device before we market or distribute the corrected device. Seeking such approvals or clearances may delay our ability to replace the recalled devices in a timely manner. Moreover, if we do not adequately address problems associated with our devices, we may face additional regulatory enforcement action, including FDA warning letters, product seizure, injunctions, administrative penalties, or civil or criminal fines.

In the EEA, our European operations must comply with the EU Medical Device Vigilance System, the purpose of which is to improve the protection of health and safety of patients, users and others by reducing the likelihood of reoccurrence of incidents related to the use of a medical device. Under this system, incidents must be reported to the Competent Authorities of the EEA Member States. An incident is defined as any malfunction or deterioration in the characteristics and/or performance of a device, as well as any inadequacy in labelling or instructions that may, directly or indirectly, lead or have led to death or serious health deterioration of a patient. Incidents are evaluated by the EEA Competent Authorities to whom they have been reported, and where appropriate, information is disseminated between them in the form of National Competent Authority Reports. The Medical Device Vigilance System is further intended to facilitate a direct, early and harmonized implementation of Field Safety Corrective Action, across the EEA Member States where the device is in use. An FSCA is an action taken by a manufacturer to reduce a risk of death or serious deterioration in the state of health associated with the use of a medical device that is already placed on the market. An FSCA may include the recall, modification, exchange, destruction or retrofitting of the device. FSCAs must be communicated by the manufacturer or its legal representative to its customers and/or to the end users of the device through Field Safety Notices.

If our products cause or contribute to a death or a serious injury, or malfunction in certain ways, we will be subject to medical device reporting regulations, which can result in voluntary corrective actions or agency enforcement actions.

Under the FDA MDR regulations, we are required to report to the FDA any incident in which our products have or may have caused or contributed to a death or serious injury or in which our product malfunctioned and, if the malfunction were to recur, would likely cause or contribute to death or serious injury. If we fail to report these events to the FDA within the required timeframes, or at all, the FDA could take enforcement action against us. Any adverse event involving our products could result in future voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection, mandatory recall or other enforcement action. Any corrective action, whether voluntary or involuntary, or litigation, will require the dedication of our time and capital, distract management from operating the business, and may harm our reputation and financial results.

Product liability claims could adversely impact our consolidated financial condition and our earnings and impair our reputation.

Our business exposes us to potential product liability risks that are inherent in the design, manufacture and marketing of medical devices. In addition, many of the medical devices we manufacture and sell are designed to be implanted in the human body for long periods of time. Component failures, manufacturing defects, design flaws or inadequate disclosure of product-related risks or product-related information with respect to these or other products we manufacture or sell could result in an unsafe condition or injury to, or death of, a patient. The occurrence of such an event could result in product liability claims or a recall of, or safety alert relating to, one or more of our products. We have elected to self-insure with respect to a portion of our product liability risks and hold global insurance policies in amounts we believe are adequate to cover future losses. Product liability claims or product recalls in the future,

regardless of their ultimate outcome, could have a material adverse effect on our business and reputation and on our ability to attract and retain customers for our products, and losses from product liability claims in the future could exceed our product liability insurance coverage and lead to a material adverse effect on our financial condition.

We currently are involved in litigation that could adversely affect our business and financial results, divert management's attention from our business, and subject us to significant liabilities.

As described under "Note 24. Commitments and Contingencies - Litigation" in our consolidated financial statements included in this Annual Report, we are involved in various litigation, which may adversely affect our financial condition and may require us to devote significant resources to our defense of these claims.

Such litigation involves 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. relating to our 3T heater-cooler product. As of 27 February 2017, we are involved in approximately 110 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.

Although we are defending these matters vigorously, we cannot predict with certainty the outcome or effect of any claim or other litigation matter, and there can be no assurance as to the ultimate outcome of any litigation or proceeding. Litigation may have a material adverse effect on us because of potential adverse outcomes, defense costs, the diversion of our management's resources, availability of insurance coverage and other factors.

Our insurance policies may not be adequate to cover future losses.

Our insurance policies (including general and products liability) provide insurance in such amounts and against such risks we have reasonably determined to be prudent in accordance with industry practices or as is required by law or regulation. Although, based on historical loss trends, we believe that our insurance coverage will be adequate to cover future losses, we cannot guarantee that this will remain true. Historical trends may not be indicative of future losses, and losses from unanticipated claims could have a material adverse impact on our consolidated earnings, financial condition, and/or cash flows.

Our manufacturing operations require us to comply with the FDA's and other governmental authorities' laws and regulations regarding the manufacture and production of medical devices, which is costly and could subject us to enforcement action.

We and certain of our third-party manufacturers are required to comply with the FDA's current Good Manufacturing Practice ("GMP") requirements, as embodied in the QSR, which covers the design, testing, production, control, quality assurance, labelling, packaging, sterilization, storage and shipping of medical device products in the United States. We and certain of our suppliers also are subject to the regulations of foreign jurisdictions regarding the manufacturing process for products marketed outside of the United States. The FDA enforces the QSR through periodic announced (routine) and unannounced (for cause or directed) inspections of manufacturing facilities, during which the FDA may issue Forms FDA-483 listing inspectional observations which, if not addressed to the FDA's satisfaction, can result in further enforcement action. Similar inspections are carried out in the EEA by Notified Bodies and EEA Competent Authorities. Our failure, or the failure of one of our suppliers, to comply with applicable statutes and regulations administered by the FDA and other regulatory bodies, or the failure to timely and adequately respond to any adverse inspectional observations or product safety issues could result in:

- untitled letters, warning letters, fines, injunctions or consent decrees;
- customer notifications or repair, replacement, refund, recall, detention or seizure of products;
- operating restrictions or partial suspension or total shutdown of production;
- refusal to grant or delay in granting 510(k) clearance or PMA approval of new products or modified products;
- withdrawing 510(k) clearances or PMA approvals that have already been granted;
- refusal to grant export approval for our products; or

- civil penalties or criminal prosecution.

Any of these actions could impair our ability to produce our products in a cost-effective and timely manner in order to meet customers' demands. We also may be required to bear other costs or take other actions that may have a negative impact on our future revenue and ability to generate profits. Furthermore, our key component suppliers may not currently be or may not continue to be in compliance with all applicable regulatory requirements, which could result in failure to produce products on a timely basis or in the required quantities, if at all.

Quality problems with our processes, goods, and services could harm our reputation for producing high-quality products and erode our competitive advantage, sales, and market share.

Quality is extremely important to us and our customers due to the serious and costly consequences of product failure. Our quality certifications are critical to the marketing success of our goods and services. If we fail to meet these standards, our reputation could be damaged, we could lose customers, and our revenue and results of operations could decline. Aside from specific customer standards, our success depends generally on our ability to manufacture to exact tolerances precision-engineered components, subassemblies, and finished devices from multiple materials. If our components fail to meet these standards or fail to adapt to evolving standards, our reputation as a manufacturer of high-quality components will be harmed, our competitive advantage could be damaged, and we could lose customers and market share.

We are subject to substantial post-market government regulation and any adverse regulatory action may materially adversely affect our financial condition and business operations.

Our medical devices remain subject to regulation by numerous government agencies following clearance or approval, including the global device regulatory bodies. To varying degrees, each of these agencies requires us to comply with laws and regulations governing manufacturing, labelling, marketing, distribution, reporting, importing and exporting of our medical devices. In recent years, the FDA in particular has significantly increased its oversight of companies subject to its regulations, including medical device companies, by hiring new investigators and stepping up inspections of manufacturing facilities. The FDA has recently also significantly increased the number of warning letters issued to companies.

Device manufacturers are permitted to promote products solely for the uses and indications set forth in the approved product labelling. A number of enforcement actions have been taken against manufacturers that promote products for "off-label" uses, including actions alleging that federal healthcare program reimbursement of products promoted for "off-label" uses are false and fraudulent claims to the government. The failure to comply with "off-label" promotion restrictions can result in significant administrative obligations and costs, and potential penalties from, and/or agreements with, the federal government.

We use many distributors, agents and independent sales representatives in certain territories and thus rely on their compliance with applicable laws and regulations, such as the FCPA, the U.S. Anti-Kickback Statute, the U.S. False Claims Act, the U.S. Sunshine Act, similar laws in countries located outside the United States and other applicable federal, state or applicable international laws. If a global regulatory body were to conclude that we are not in compliance with applicable laws or regulations, or that any of our medical devices are ineffective or pose an unreasonable health risk, it could ban the medical devices, detain or seize adulterated or misbranded medical devices, order a recall, repair, replacement, or refund of the devices, refuse to grant pending pre-market approval applications or require certificates of foreign governments for exports, and/or require us to notify healthcare professionals and others that the devices present unreasonable risks of substantial harm to public health. The global device regulatory bodies may also impose operating restrictions on a company-wide basis, enjoin and/or restrain certain conduct resulting in violations of applicable law pertaining to medical devices, and assess civil or criminal penalties against, or recommend prosecution of, our officers, employees, or our company itself. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively marketing and selling our products.

We are also subject to various environmental laws and regulations worldwide. Our operations involve the use of substances regulated under environmental laws, primarily those used in manufacturing and sterilization processes. We cannot provide assurance that a potential non-compliance with environmental protection laws and regulations will not have a material impact on our consolidated earnings, financial condition, and/or cash flows.

Finally, any governmental law or regulation imposed in the future may have a material adverse effect on us. From time to time, legislation is drafted and introduced that could significantly change the statutory provisions governing the clearance or approval, manufacture and marketing of medical devices. In addition, global regulatory bodies' regulations and guidance can be revised or reinterpreted in ways that may significantly affect our business and products. It is impossible to predict whether legislative changes will be enacted or regulations, guidance or interpretations changed, and what the impact of such changes, if any, may be.

Our failure to comply with rules relating to healthcare fraud and abuse, false claims and privacy and security laws may subject us to penalties and adversely impact our reputation and business operations.

Our devices and therapies are subject to regulation regarding quality and cost by various governmental agencies worldwide responsible for coverage, reimbursement and regulation of healthcare goods and services. In the United States, for example, federal government healthcare laws apply when a customer submits a claim for an item or service that is reimbursable under a U.S. federal government-funded healthcare program, such as Medicare or Medicaid. The principal U.S. federal laws implicated include:

- the Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and wilfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs, such as the Medicare and Medicaid programs. A person or entity does not need to have actual knowledge of the Anti-Kickback Statute or specific intent to violate it to have committed a violation; in addition, the government may assert that a claim including items or services resulting from a violation of the Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

- federal civil and criminal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid or other federal third-party payors that are false or fraudulent. Actions under the False Claims Act can be brought by the Attorney General or as *qui-tam* actions by private individuals acting in the name of the government. Such private individuals, commonly known as "whistleblowers," may share in any amounts paid by the entity to the government in fines or settlement. When an entity is determined to have violated the False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties for each separate false claim;

- the federal Civil Monetary Penalties Law, which prohibits, among other things, offering or transferring remuneration to a federal healthcare beneficiary that a person knows or should know is likely to influence the beneficiary's decision to order or receive items or services reimbursable by the government from a particular provider or supplier;

- federal criminal laws that prohibit executing a scheme to defraud any federal healthcare benefit program or making false statements relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation;

- HIPAA, as amended by HITECH, which governs the conduct of certain electronic healthcare transactions and protects the security and privacy of protected health information.

- the U.S. Sunshine Act, which requires manufacturers of drugs, devices, biologic and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the CMS information related to payments or other "transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrist and chiropractors) and teaching hospitals, and requires applicable manufacturers and group purchasing organizations to report annually to the government ownership and investment interests held by the physicians described above and their immediate family members and payments or other "transfers of value" to such physician owners. Manufacturers are required to submit reports to CMS by the 90th day of each calendar year. Failure to submit required information may result in civil monetary penalties of up to an aggregate of $150,000 per year (or up to an aggregate of $1 million per year for "knowing failures"), for all payments, transfers of value or ownership or investment interests that are not timely, accurately, and completely reported in an annual submission;

- the FCPA, which prohibits corporations and individuals from paying, offering to pay or authorizing the payment of anything of value to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity;

- the UK Bribery Act, which prohibits both domestic and international bribery, as well as bribery across both public and private sectors; and bribery provisions contained in the German Criminal Code, which, pursuant to draft legislation being prepared by the German government, may make the corruption and corruptibility of physicians in private practice and other healthcare professionals a criminal offence; and

- analogous state and foreign law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers; state laws that

require device companies to comply with the industry's voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require device manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

The risk of being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbours available under such laws, it is possible that some of our business activities, including our relationships with surgeons and other healthcare providers, some of whom recommend, purchase and/or prescribe our devices, group purchasing organizations and our independent sales agents and distributors, could be subject to challenge under one or more of such laws. We are also exposed to the risk that our employees, independent contractors, principal investigators, consultants, vendors, independent sales agents and distributors may engage in fraudulent or other illegal activity. While we have policies and procedures in place prohibiting such activity, misconduct by these parties could include, among other infractions or violations, intentional, reckless and/or negligent conduct or unauthorized activity that violates FDA regulations, including those laws that require the reporting of true, complete and accurate information to the FDA, manufacturing standards, federal and state healthcare fraud and abuse laws and regulations, laws that require the true, complete and accurate reporting of financial information or data or other commercial or regulatory laws or requirements. It is not always possible to identify and deter misconduct by our employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations.

There are similar laws and regulations applicable to us outside the United States, all of which are subject to evolving interpretations. Global enforcement of anti-corruption laws, including but not limited to the UK Bribery Act, the Brazil Clean Companies Act, and continued enforcement in the Europe, Middle East and Asia Pacific has increased substantially in recent years, with more frequent voluntary self-disclosures by companies, aggressive investigations and enforcement proceedings by governmental agencies, and assessment of significant fines and penalties against companies and individuals. Our operations create the risk of unauthorized payments or offers of payments by one of our employees, consultants, sales agents, or distributors because these parties are not always subject to our control. It is our policy to implement safeguards to discourage these practices; however, our existing safeguards and any future improvements may prove to be less than effective, and our employees, consultants, sales agents, or distributors may engage in conduct for which we might be held responsible. Any alleged or actual violations of these regulations may subject us to government scrutiny, severe criminal or civil sanctions and other liabilities, including exclusion from government contracting or government healthcare programs, and could negatively affect our business, reputation, operating results, and financial condition. In addition, a governmental authority may seek to hold us liable for successor liability violations committed by any companies in which we invest or that we acquire.

If a governmental authority were to conclude that we are not in compliance with applicable laws and regulations, we and our officers and employees could also be subject to exclusion from participation as a supplier of product to beneficiaries. If we are excluded from participation based on such an interpretation it could adversely affect our reputation and business operations. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

While we believe we have a strong culture of compliance and adequate systems of control, and we seek continuously to improve our systems of internal controls and to remedy any weaknesses identified, there can be no assurance that the policies and procedures will be followed at all times or will effectively detect and prevent violations of the applicable laws by one or more of our employees, consultants, agents or partners and, as a result, we may be subject to penalties and material adverse consequences on our business, financial condition or results of operations.

Laws and/or collective bargaining agreements relating to employees may impact our flexibility to redefine and/or strategically reposition our activities.

In many of the countries where we operate, employees are covered by various laws and/or collective bargaining agreements that endow them, through their local or national representatives, with the right to be consulted in relation to specific issues, including the downsizing or closing of departments and staff reductions. The laws and/or collective bargaining agreements that are applicable to these agreements could have an impact on our flexibility, as they apply to programs to redefine and/or strategically reposition our activities. Our ability to implement staff downsizing programs or even temporary interruptions of employment relationships is

predicated on the approval of government entities and the consent of labour unions. Union-organized work stoppages by employees could have a negative impact on our business.

We are substantially dependent on patent and other proprietary rights and failing to protect such rights or to be successful in litigation related to our rights or the rights of others may result in our payment of significant monetary damages and/or royalty payments, negatively impact our ability to sell current or future products, or prohibit us from enforcing its patent and other proprietary rights against others.

We operate in an industry characterised by extensive patent litigation. Physician customers have historically moved quickly to new products and new technologies. As a result, intellectual property rights, particularly patents and trade secrets, play a significant role in product development and differentiation; however, intellectual property litigation is inherently complex and unpredictable and appellate courts can overturn lower court decisions. Furthermore, as our business increasingly relies on technology systems and infrastructure, our intellectual property, other proprietary technology and other sensitive data are potentially vulnerable to loss, damage or misappropriation.

Competing parties in our industry frequently file multiple lawsuits to leverage patent portfolios across product lines, technologies and geographies and to balance risk and exposure between the parties. In some cases, several competitors are parties in the same proceeding, or in a series of related proceedings, or litigate multiple features of a single class of devices. These forces frequently drive settlement not only of individual cases, but also of a series of pending and potentially related and unrelated cases. In addition, although monetary and injunctive relief is typically sought, remedies and restitution are generally not determined until the conclusion of the proceedings. Accordingly, the outcomes of individual cases are difficult to time, predict or quantify.

Third parties have asserted, and may in the future assert, that our current and former product offerings infringe patents owned or licensed by them. We have similarly asserted, and may in the future assert, that products sold by our competitors infringe patents owned or licensed by us. Adverse outcomes in one or more of the proceedings against us could limit our ability to sell certain products in certain jurisdictions, or reduce our operating margin on the sale of these products and could have a material adverse effect on our financial condition, results of operations or liquidity.

We also rely on a combination of patents, trade secrets, and non-disclosure and non-competition agreements to protect our proprietary intellectual property, and we will continue to do so. While we intend to defend against any threats to our intellectual property, these patents, trade secrets, or other agreements may not adequately protect our intellectual property. Further, pending patent applications may not result in patents being issued to us. Patents issued to or licensed by us in the past or in the future may be challenged or circumvented by competitors and such patents may be found invalid, unenforceable or insufficiently broad to protect our technology and may limit our competitive advantage. Third parties could obtain patents that may require us to negotiate licenses to conduct our business, and the required licenses may not be available on reasonable terms or at all. We also rely on non-disclosure and non-competition agreements with certain employees, consultants, and other parties to protect, in part, trade secrets and other proprietary rights. We cannot be certain that these agreements will not be breached, that we will have adequate remedies for any breach, that others will not independently develop substantially equivalent proprietary information, or that third parties will not otherwise gain access to our trade secrets or proprietary knowledge.

In addition, the laws of certain countries in which we market our products are not uniform and may not protect our intellectual property rights equally. If we are unable to protect our intellectual property in particular countries, it could have a material adverse effect on our business, financial condition or results of operations.

Furthermore, our intellectual property, other proprietary technology and other sensitive data are potentially vulnerable to loss, damage or misappropriation from system malfunction, computer viruses, unauthorized access to our data or misappropriation or misuse thereof by those with permitted access, and other events. While we have invested to protect our intellectual property and other data, and continue to work diligently in this area, there can be no assurance that our precautionary measures will prevent breakdowns, breaches, cyber-attacks or other events. Such events could have a material adverse effect on our reputation, business, financial condition or results of operations.

Our research and development efforts rely on investments and investment collaborations, and we cannot guarantee that any previous or future investments or investment collaborations will be successful.

Our strategy to provide a broad range of therapies to restore patients to fuller, healthier lives requires a wide variety of technologies, products, and capabilities. The rapid pace of technological development in the medical industry and the specialized expertise required in different areas of medicine make it difficult for one company alone to develop a broad portfolio of technological solutions. As a

result, we also rely on investments and investment collaborations to provide us access to new technologies both in areas served by our existing or legacy businesses as well as in new areas.

We expect to make future investments where we believe that we can stimulate the development of, or acquire new technologies and products to further our strategic objectives and strengthen our existing businesses. Investments and investment collaborations in and with medical technology companies are inherently risky, and we cannot guarantee that any of our previous or future investments or investment collaborations will be successful or will not materially adversely affect our consolidated earnings, financial condition and/or cash flows.

Our products are the subject of clinical studies conducted by us, our competitors, or other third parties, the results of which may be unfavourable, or perceived as unfavourable, and could have a material adverse effect on our business, financial condition, and results of operations.

As a part of the regulatory process of obtaining marketing clearance or approval for new products and modifications to or new indications for existing products, we conduct and participate in numerous clinical studies with a variety of study designs, patient populations, and trial endpoints. Unfavourable or inconsistent clinical data from existing or future clinical studies conducted by us, by our competitors, or by third parties, or the market's or global regulatory bodies' perception of this clinical data, may adversely impact our ability to obtain product clearances or approvals, our position in, and share of, the markets in which we participate, and our business, financial condition, and results of operations. Success in pre-clinical testing and early clinical studies does not always ensure that later clinical studies will be successful, and we cannot be sure that later studies will replicate the results of prior studies. Clinical studies must also be conducted in compliance with Good Clinical Practice requirements administered by the FDA and other foreign regulatory authorities, and global regulatory bodies may undertake enforcement action against us based on a failure to adhere to these requirements. Any delay or termination of our clinical studies will delay the filing of product submissions and, ultimately, our ability to commercialize new products or product modifications. It is also possible that patients enrolled in clinical studies will experience adverse side effects that are not currently part of the product's profile, which could inhibit further marketing and development of such products.

Consolidation in the healthcare industry could have an adverse effect on our revenue and results of operations.

Many healthcare industry companies, including medical device companies, are consolidating to create new companies with greater market power. As the healthcare industry consolidates, competition to provide goods and services to industry participants will become more intense. These industry participants may try to use their market power to negotiate price concessions or reductions for medical devices that incorporate components we produce. Increasing pricing pressures as a result of industry consolidation could have an adverse effect on our revenue, results of operations, financial position and cash flows.

The global medical device industry is highly competitive and LivaNova may be unable to compete effectively.

In the product lines in which we compete, we face a mixture of competitors ranging from large manufacturers with multiple business lines to small manufacturers that offer a limited selection of specialized products. Development by other companies of new or improved products, processes, or technologies, as discussed above, may make our products or proposed products less competitive. In addition, we face competition from providers of alternative medical therapies such as pharmaceutical companies. We face increasing competition for our indication specific patents for certain products. Competitive factors include:

- product quality, reliability and performance;
- product technology;
- breadth of product lines and product services;
- ability to identify new market trends;
- customer support;
- price;
- capacity to recruit engineers, scientists and other qualified employees; and
- reimbursement approval from governmental payors and private healthcare insurance providers.

Shifts in industry market share can occur in connection with product issues, physician advisories, safety alerts, and publications about our products reflecting the importance of product quality, product efficacy, and quality systems in the medical device industry. In the current environment of managed care, consolidation among healthcare providers, increased competition, and declining reimbursement rates, we are increasingly required to compete on the basis of price. In order to continue to compete effectively, we must continue to create, invest in, or acquire advanced technology, incorporate this technology into our proprietary products, obtain regulatory approvals in a timely manner, and manufacture and successfully market our products. Additionally, we may experience

design, manufacturing, marketing or other difficulties that could delay or prevent our development, introduction or marketing of new products or new versions of our existing products. As a result of such difficulties and delays, our development expenses may increase and, as a consequence, our results of operations could suffer.

Risks related to the reduction or interruption in supply and an inability to develop alternative sources for supply may adversely affect our manufacturing operations and related product sales.

We maintain manufacturing operations in six countries located throughout the world and purchase many of the components and raw materials used in manufacturing these products from numerous suppliers in various countries. Any problem affecting a supplier (whether due to external or internal causes) could have a negative impact on us.

In a few limited cases, specific components and raw materials are purchased from primary or main suppliers (or in some cases, a single supplier) for reasons related to quality assurance, cost-effectiveness ratio and availability. While we work closely with our suppliers to ensure supply continuity, we cannot guarantee that our efforts will always be successful. Moreover, due to strict standards and regulations governing the manufacture and marketing of our products, we may not be able to quickly locate new supply sources in response to a supply reduction or interruption, with negative effects on our ability to manufacture our products effectively and in a timely fashion.

We manufacture our products at production facilities in Italy, Germany, the United States, Canada, Brazil and Australia, all of which are exposed to the risk of production stoppages caused by exceptional or accidental events (fires, shutdowns of access roads, etc.) or natural calamities (floods, earthquakes, etc.). Even though we have implemented what we believe to be appropriate preventive actions and insurance coverage, the possibility that the occurrence of events of exceptional severity or duration could have an impact on our performance cannot be excluded.

Natural disasters, war, acts of terrorism and other events could adversely affect our future revenue and operating income.

Natural disasters (including pandemics), war, terrorism, labour disruptions and international conflicts, and actions taken by governmental entities or by our customers or suppliers in response to such events, could cause significant economic disruption and political and social instability in the areas in which we operate. These events could result in decreased demand for our products, adversely affect our manufacturing and distribution capabilities, or increase the costs for or cause interruptions in the supply of materials from our suppliers.

We are subject to the risks of international economic and political conditions.

Our international operations are subject to risks that are inherent in conducting business overseas and under foreign laws, regulations and customs. These risks include possible nationalization, exit from the European Union, expropriation, importation limitations, violations of U.S. or local laws, including, but not limited to, the U.S. FCPA, pricing restrictions, and other restrictive governmental actions. Following a referendum in June 2016 in which voters in the United Kingdom approved an exit from the EU for example, the UK government is expected to initiate a process to withdraw from the EU and begin negotiating the terms of the UK's future relationship with the EU. A withdrawal could, among other outcomes, result in the deterioration of economic conditions, volatility in currency exchange rates, and increased regulatory complexities. Any significant changes in the competitive, political, legal, regulatory, reimbursement or economic environment where we conduct international operations may have a material impact on our business and our consolidated financial condition or results of operations.

Deterioration in the global economy could have a significant impact on our business. Customers and vendors may experience financial difficulties or be unable to borrow money to fund their operations, which may adversely impact their ability to purchase our products or to pay for our products on a timely basis, if at all. As with our customers and vendors, these economic conditions make it more difficult for us to accurately forecast and plan future business activities. In addition, a significant amount of our trade receivables are either with third party intermediaries marketing, selling and distributing our products or with national healthcare systems in many countries, and repayment of these receivables is dependent upon the financial stability of the economies of those countries.

In light of these global economic fluctuations, we continue to monitor the creditworthiness of all of our customers worldwide. Failure to receive payment of all or a significant portion of receivables could adversely affect results of operations and cash flows. Deterioration in the creditworthiness of the Eurozone countries, the withdrawal of one or more member countries from the EU or the failure of the Euro as a common European currency could adversely affect our revenue, financial condition or results of operations.

We intend to continue to pursue growth opportunities in sales worldwide, including in emerging markets outside Europe and the United States, which could expose us to greater risks associated with sales and operations in these regions. Emerging economies

have less mature product regulatory systems and can have more volatile financial markets. Our profitability and operations are, and will continue to be, subject to a number of risks and potential costs, including:

- local product preferences and product requirements;
- longer-term receivables than are typical in the EU or the United States;
- fluctuations in foreign currency exchange rates;
- less intellectual property protection in some countries outside the EU or the United States;
- trade protection measures and import and export licensing requirements;
- workforce instability; and
- political and economic instability.

We are exposed to foreign currency exchange risk.

We transact business in numerous countries around the world and expect that a significant portion of our business will continue to take place in international markets. Consolidated financial statements are prepared in our functional currency, while the financial statements of each of our subsidiaries are prepared in the functional currency of that entity.

Accordingly, fluctuations in the exchange rate of the functional currencies of our foreign currency entities against our functional currency will impact our results of operations and financial condition. Although we may elect to hedge certain foreign currency exposure, we cannot be certain that the hedging activity will eliminate our currency risk.

In many of the international markets in which we do business, including certain parts of Europe, Asia and Latin America, we sell our products through distributors who may misrepresent our products.

Selling our products through distributors, particularly in public tenders, may expose us to a higher degree of risk. Our agents and distributors are independent contractor third parties retained by us to sell our products in different markets. If they misrepresent our products, do not provide appropriate service and delivery, or commit a violation of local or U.S. law, our reputation could be harmed, and we could be subject to fines, sanctions or both.

We have risks related to access to financial resources.

The credit lines provided by our lenders are governed by clauses, commitments and covenants. The failure to comply with these provisions can constitute a failure to perform a contractual obligation, which authorizes the lender banks to demand the immediate repayment of the facilities, making it difficult to obtain alternative resources.

Changes in our financial position are the result of a number of factors, specifically including the achievement of budgeted objectives and the trends shaping general economic conditions, and the financial markets and the industry within which we operate. We expect to generate the resources needed to repay maturing indebtedness and fund scheduled investments from the cash flow produced by our operations, our available liquidity, the renewal or re-financing of bank borrowings and possibly, access to the capital markets. Even under current market conditions, we expect that our operations will generate adequate financial resources. Nevertheless, given the volatility in current financial markets, the possibility that problems in the banking and monetary markets could hinder the normal handling of financial transactions cannot be excluded.

Certain of our debt instruments will require us to comply with certain affirmative covenants and specified financial covenants and ratios.

Certain restrictions in our debt instruments could affect our ability to operate and may limit our ability to react to market conditions or to take advantage of potential business opportunities as they arise. For example, such restrictions could adversely affect our ability to finance our operations, make strategic acquisitions, investments or alliances, restructure our organization or finance capital needs. Additionally, our ability to comply with these covenants and restrictions may be affected by events beyond our control, such as prevailing economic, financial, regulatory and industry conditions. If any of these restrictions or covenants is breached, we could be in default under one or more of our debt instruments, which, if not cured or waived, could result in acceleration of the indebtedness under such agreements and cross defaults under its other debt instruments. Any such actions could result in the enforcement of our lenders' security interests and/or force us into bankruptcy or liquidation, which could have a material adverse effect on our financial condition and results of operations.

As an English public limited company, certain capital structure decisions will require shareholder approval which may limit our flexibility to manage its capital structure.

We are a public limited company incorporated under the laws of England and Wales. English law provides that a board of directors may only allot shares (or rights to subscribe for or convertible into shares) with the prior authorization of shareholders, such authorization being up to the aggregate nominal amount of shares and for a maximum period of five years, each as specified in the articles of association or relevant shareholder resolution. This authorization needs to be renewed by our shareholders prior to or upon its expiration (i.e., at least every five years). Our articles of association authorize the allotment of additional shares for a period of five years from the date of the adoption of our articles up to an aggregate nominal amount of 9,764,463 Ordinary Shares, representing 20% of the number of shares in our capital as of 19 October 2015, the date of the adoption of the our articles, which authorization will need to be renewed upon expiration but may be sought more frequently for additional five-year terms (or any shorter period) and/or may be sought to allot a larger number of shares than specified in the existing authorization.

English law also generally provides shareholders with pre-emptive rights when new shares are issued for cash; however, it is possible for our articles, or shareholders in general meeting, to exclude or dis-apply pre-emptive rights. Such an exclusion or dis-application of pre-emptive rights may be for a maximum period of up to five years from the date of adoption of our articles, if the exclusion is contained in our articles, or from the date of the shareholder resolution, if the exclusion is by shareholder resolution; in either case, this exclusion would need to be renewed by our shareholders prior to or upon its expiration (i.e., at least every five years). Our articles exclude pre-emptive rights in relation to an allotment of shares for cash pursuant to the authority referred to above for a period of five years following the date of the adoption of the our articles, which exclusion will need to be renewed upon expiration (i.e., at least every five years) to remain effective, but may be sought more frequently for additional five-year terms (or any shorter period) and/or may be sought to apply a larger number of shares than specified in the existing, dis-application authority.

English law also generally prohibits a public company from re-purchasing its own shares without the prior approval of shareholders by ordinary resolution, being a resolution passed by a simple majority of votes cast, and other formalities. Such approval may be valid for a maximum period of up to five years.

Our inability to integrate recently acquired businesses or to successfully complete future acquisitions could limit our future growth or otherwise be disruptive to our ongoing business.

From time to time, we acquire and expect to pursue acquisitions in support of our strategic goals. In connection with any such acquisitions, we face significant challenges in managing and integrating any expanded or combined operations, including acquired assets, operations and personnel. There can be no assurance that acquisition opportunities will be available on acceptable terms or at all, or that we will be able to obtain necessary financing or regulatory approvals to complete potential acquisitions. Our success in implementing this strategy will depend to some degree on the ability of management to identify, complete and successfully integrate commercially viable acquisitions. Acquisition transactions may disrupt our ongoing business and distract management from other responsibilities.

The success of any acquisition, investment or alliance may be affected by a number of factors, including our ability to properly assess and value the potential business opportunity or to successfully integrate any businesses we may acquire into our existing business. The integration of the operations of acquired businesses requires significant efforts, including the coordination of information technologies, human resources, research and development, sales and marketing, operations, manufacturing, legal, compliance and finance. These efforts result in additional expenses and involve significant amounts of management's time that cannot then be dedicated to other projects. Failure to manage and coordinate the growth of the combined company successfully could also have an adverse impact on our business. In addition, we cannot be certain that our investments, alliances and acquired businesses will become profitable or remain so. If our investments, alliances or acquisitions are not successful, we may record unexpected impairment charges.

We have and will continue to incur certain transaction and merger-related costs in connection with the Merger between Sorin and Cyberonics.

We have incurred and expect to incur a number of non-recurring direct and indirect costs associated with the Mergers. These costs and expenses include fees paid to financial, legal and accounting advisors, filing fees, printing expenses and other related charges as well as ongoing expenses related to facilities and systems consolidation costs, severance payments and other potential employment-related costs, including payments remaining to be made to certain Sorin and Cyberonics executives. During the years ended 31 December 2017 and 31 December 2016, we incurred $15.5 million and $20.4 million in merger and integration expenses, respectively. In the transitional period, 25 April 2015 to 31 December 2015, we incurred $55.8 million in merger and integration expenses. We

expect additional expenses in the future for the integration of the two merged businesses. Integration expenses related to systems integration, organization structure integration, finance, synergy and tax planning, transitioning of accounting methodologies, certain re-branding efforts, and restructuring efforts related to our intent to leverage economies of scale, eliminate overlapping corporate expenses and streamline distributions, logistics and office functions in order to reduce overall costs. While we assumed a certain level of expenses in connection with the terms of the Transaction Agreement, there are many factors beyond our control, including unanticipated costs that could affect the total amount or the timing of these expenses. Although we expect that the benefits of the Mergers will offset the transaction expenses and implementation costs over time, this net benefit may not be achieved in the near term or at all.

We may incur goodwill impairments for goodwill recorded at the Mergers.

During the year ended 31 December 2016, we recorded a pre-tax, non-cash loss on impairment of our Cardiac Rhythm Management reporting unit goodwill of $18.3 million, which was included within discontinued operations in the consolidated statements of income (loss). As of 31 December 2017, the carrying value of our goodwill totalled $784.2 million, which represented 31.3% of our total assets.

We test goodwill for impairment on an annual basis or when events or changes in circumstances indicate that a potential impairment exists. The goodwill impairment test requires us to identify reporting units, perform a qualitative assessment of the likelihood that a reporting unit's carrying value exceeds its estimated fair value, and in certain circumstances estimate each reporting unit's fair value as of the testing date. Our calculation of the fair value of our reporting units is based on estimates of future discounted cash flows, which reflect management's judgments and assumptions regarding the appropriate risk-adjusted discount rate, as well as future operating performance and our business outlook, including expected sales, operating costs, capital requirements, growth rates and terminal values for each of our reporting units. If the aggregate fair value of our reporting units exceeds our market capitalization, we evaluate the reasonableness of the implied control premium.

The estimates used to determine the fair value of our reporting units reflect management's best estimates of inputs and assumptions that a market participant would use. Future declines in any one of our reporting units' operating performance or our anticipated business outlook may reduce the estimated fair value of a reporting unit and result in an impairment of goodwill. Factors that could have a negative impact on the fair value of our reporting units include, but are not limited to:

- The ability of our sales force to effectively market and promote our products, and the extent to which those products gain market acceptance;
- the existence and timing of any approvals, changes, or non-coverage determinations for reimbursement by third-party payors;
- the rate and size of expenditures incurred on our clinical, manufacturing, sales, marketing and product development efforts;
- our ability to obtain and retain personnel;
- the availability of key components, materials and contract services, which depends on our ability to forecast sales, among other things;
- investigations of our business and business-related activities by regulatory or other governmental authorities;
- variations in timing and quantity of product orders;
- temporary manufacturing interruptions or disruptions;
- the timing and success of new product and new market introductions, as well as delays in obtaining domestic or foreign regulatory approvals for such introductions;
- increased competition, patent expirations or new technologies or treatments;
- product recalls or safety alerts;
- litigation, including product liability, patent, employment, securities class action, stockholder derivative, general commercial and other lawsuits;
- the financial health of our customers, and their ability to purchase our products in the current economic environment;
- other unusual or non-operating expenses, such as expenses related to mergers or acquisitions, may cause operating result variations;
- increases in the market-participant risk-adjusted Weighted Average Cost of Capital; and
- declines in anticipated growth rates.

Adverse changes in one or more of these factors could result in a goodwill impairment in future periods.

As our shares have been delisted from the London Stock Exchange, the City Code on Takeovers and Mergers no longer applies to us and our shareholders and we will therefore not have the benefit of the protections that the Code affords.

On 23 February 2017, we announced that we had made applications (i) to the UK Financial Conduct Authority for cancellation of the standard listing of our Ordinary Shares of £1 per share on the Official List of the UK Listing Authority and (ii) to the LSE to cancel the admission to trading of the Shares on the main market of the LSE. In connection with the Cancellation, we also decided to terminate our UK domestic depositary interest facility. Trading of our shares on the LSE ceased from and after the close of business on 4 April 2017.

The Panel on Takeovers and Mergers determined that the City Code on Takeovers and Mergers no longer applies to us indicating among other things that we and our shareholders would not have the benefit of the protections the Code affords, including, but not limited to, the requirement that a person who acquires an interest in Shares carrying 30% or more of the voting rights in us must make a cash offer to all other shareholders at the highest price paid in the 12 months before the offer was announced.

Changes in tax laws or exposure to additional income tax liabilities could have a material impact on our financial condition and results of operations.

We are subject to income taxes as well as non-income based taxes, in the United States, the UK, the EU and various other jurisdictions. We are also subject to ongoing tax audits in various foreign jurisdictions. Tax authorities may disagree with certain positions we have taken and assess additional taxes. We believe that our accruals reflect the probable outcome of known contingencies. However, there can be no assurance that we will accurately predict the outcomes of ongoing audits, and the actual outcomes of these audits could have a material impact on our consolidated statements of income (loss) or financial condition. Changes in tax laws or tax rulings could materially impact our effective tax rate or results of operations.

On 22 December 2017, the Tax Cuts and Jobs Act was signed into U.S. law which provided numerous amendments to the Internal Revenue Code of 1986. The Tax Cuts and Jobs Act may impact our U.S. income tax expense (benefit) from continuing operations in future periods.

The IRS may not agree with the conclusion that we should be treated as a foreign corporation for U.S. federal tax purposes, and we may be required to pay substantial U.S. federal income taxes.

We believe that under current law, we are treated as a foreign corporation for U.S. federal tax purposes because we are a UK incorporated entity. Although we are incorporated in the UK, the IRS may assert that we should be treated as a U.S. corporation (and, therefore, a U.S. tax resident) for U.S. federal tax purposes pursuant to Section 7874 of the Code. For U.S. federal tax purposes, a corporation is considered a tax resident in the jurisdiction of its organization or incorporation, except as provided under Section 7874. Subject to the discussion of Section 7874 below, because we are a UK incorporated entity, we would be classified as a foreign corporation (and, therefore, a non-U.S. tax resident) under these rules. Section 7874 provides an exception under which a foreign incorporated entity may, in certain circumstances, be treated as a U.S. corporation for U.S. federal tax purposes.

For us to be treated as a foreign corporation for U.S. federal tax purposes under Section 7874, in connection with the Mergers completed on 19 October 2015, either (i) the former stockholders of Cyberonics must own (within the meaning of Section 7874) less than 80% (by both vote and value) of our shares by reason of holding shares of Cyberonics common stock, or (ii) we must have substantial business activities in the UK after the Mergers (taking into account the activities of our expanded affiliated group). For purposes of Section 7874, "expanded affiliated group" means a foreign corporation and all subsidiaries in which the foreign corporation, directly or indirectly, owns more than 50% of the shares by vote and value. We do not expect to have substantial business activities in the UK within the meaning of these rules.

We believe that because the former stockholders of Cyberonics own (within the meaning of Section 7874) less than 80% (by both vote and value) of our shares by reason of holding shares of Cyberonics common stock, the test set forth above to treat us as a foreign corporation was satisfied in connection with the Mergers completed on 19 October 2015. However, the IRS may disagree with the calculation of the percentage of our shares deemed held by former holders of Cyberonics common stock by reason of being former holders of Cyberonics common stock due to the calculation provisions laid out under Section 7874 and accompanying guidance. The rules relating to calculating the Section 7874 Percentage are new and subject to uncertainty, and thus it cannot be assured that the IRS will agree that the ownership requirements to treat us as a foreign corporation were met. In addition, there have been legislative proposals to expand the scope of U.S. corporate tax residence, including by potentially causing us to be treated as a U.S. corporation if our management and control and affiliates were determined to be located primarily in the United States. There have also been recent IRS publications expanding the application of Section 7874 and there could be prospective or retroactive changes to Section 7874 or the U.S. Treasury Regulations promulgated thereunder that could result in us being treated as a U.S. corporation.

The IRS may not agree with the conclusion that Section 7874 does not limit Cyberonics' and its U.S. affiliates' ability to utilize their U.S. tax attributes and does not impose an excise tax on gain recognized by certain individuals.

If the Section 7874 Percentage is calculated to be at least 60% but less than 80%, Section 7874 imposes a minimum level of tax on any "inversion gain" of a U.S. corporation (and any U.S. person related to the U.S. corporation) after the acquisition. Inversion gain is defined as (i) the income or gain recognized by reason of the transfer of property to a foreign related person during the 10-year period following the Cyberonics merger, and (ii) any income received or accrued during such period by reason of a license of any property by the U.S. corporation to a foreign related person. The effect of this provision is to deny the use of certain U.S. tax attributes (including net operating losses and certain tax credits) to offset U.S. tax liability, if any, attributable to such inversion gain. In addition, the IRS and the U.S. Treasury Department have issued guidance that has further limited benefits of certain post-combination transactions for combinations resulting in a Section 7874 Percentage of at least 60% but less than 80%, and have announced the intention to issue future guidance that could potentially limit benefits of interest deductions from intercompany debt or other deductions deemed to inappropriately "strip" U.S. source earnings.

Additionally, if the Section 7874 Percentage is calculated to be at least 60% but less than 80%, Section 7874 and rules related thereto would impose an excise tax under Section 4985 of the Code on the gain recognized by certain "disqualified individuals" (including officers and directors of Cyberonics) on certain Cyberonics stock-based compensation held thereby at a rate equal to 15%. If the Section 4985 Excise Tax is applicable, the compensation committee of the Cyberonics board has determined that it is appropriate to provide such individuals with a payment with respect to the excise tax, so that, on a net after-tax basis, they would be in the same position as if no such excise tax had been applied.

We believe the Section 7874 Percentage following the combination of Cyberonics and Sorin was less than 60%. As a result, we believe that (i) Cyberonics and its U.S. affiliates will be able to utilize their U.S. tax attributes to offset their U.S. tax liability, any, resulting from certain subsequent specified taxable transactions, and (ii) "disqualified individuals" will not be subject to the Section 4985 Excise Tax. However, the rules relating to calculating the Section 7874 Percentage are new and subject to uncertainty, and thus it cannot be assured that the IRS will agree that the Section 7874 Percentage following the combination of Cyberonics and Sorin was less than 60%.

Our status as a foreign corporation for U.S. federal income tax purposes could be affected by a change in law.

We believe that under current law, we are treated as a foreign corporation for U.S. federal tax purposes because we are a UK incorporated entity. However, changes to the inversion rules in Section 7874 of the Code or the U.S. Treasury Regulations promulgated thereunder could adversely affect our status as a foreign corporation for U.S. federal tax purposes, and any such changes could have prospective or retroactive application to us and our respective stockholders, shareholders and affiliates. In addition, recent legislative proposals and IRS guidance have aimed to expand the scope of U.S. corporate tax residence, including by reducing the Section 7874 Percentage threshold at or above which we would be treated as a U.S. corporation or by determining our U.S. corporate tax residence based on the location of our management and control. Any such changes to Section 7874 or other such legislation, if passed, could have a significant adverse effect on our financial results.

We may not qualify for benefits under the tax treaty entered into between the UK and the United States.

We believe that we operate in a manner such that we are eligible for benefits under the tax treaty entered into between the UK and the United States; however, our ability to qualify for such benefits will depend upon the requirements contained in such treaty. Our failure to qualify for benefits under the tax treaty entered into between the UK and the United States could result in adverse tax consequences to us.

The 2016 U.S. Model Income Tax Convention released by the U.S. Treasury Department would reduce potential tax benefits with respect to us if the Section 7874 Percentage is calculated to be at least 60% but less than 80% by imposing full withholding taxes on payments pursuant to certain financing structures, distributions from our U.S. subsidiaries and payments pursuant to certain licensing arrangements. If the proposed treaty is enacted with applicability to us, it would result in material reductions in the benefit of qualifying for a treaty.

We believe that we operate so as to be treated exclusively as a resident of the UK for tax purposes, but the relevant tax authorities may treat us as also being a resident of another jurisdiction for tax purposes.

We are a company incorporated in the UK. Current UK law provides that we will be regarded as being a UK resident for tax purposes from incorporation and shall remain so unless (a) we are concurrently resident in another jurisdiction (applying the tax residence

rules of that jurisdiction) that has a double tax treaty with the UK and (b) there is a tiebreaker provision in that tax treaty which allocates exclusive residence to that other jurisdiction.

Based on our management and organizational structure, we believe that we should be regarded as resident exclusively in the UK from our incorporation for tax purposes. However, because this analysis is highly factual and may depend on future changes in our management and organizational structure, there can be no assurance regarding the final determination of our tax residence. Should we be treated as resident in a country or jurisdiction other than the UK, we could be subject to taxation in that country or jurisdiction on its worldwide income and we may be required to comply with a number of material and formal tax obligations, including withholding tax and/or reporting obligations provided under the relevant tax law, which could result in additional costs and expenses for us, as well as our shareholders, lenders and/or bondholders.

Our effective tax rate is uncertain and may vary from expectations.

No assurances can be given as to what our worldwide effective corporate tax rate will be because of, among other things, uncertainty regarding the tax regulations and laws, enactment and enforceability thereof, policies of the jurisdictions where we operate. Our actual effective tax rate may vary from our expectations or from historical trends and that variance may be material. Additionally, tax laws or their implementation and applicable tax authority practices could change in the future.

On 22 December 2017, the U.S. enacted 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. We recorded no toll charge for the year ended 31 December 2017 as we had no previously deferred foreign earnings of U.S. controlled foreign subsidiaries as of the measurement dates. As a result of the Act, we recorded a non-cash net charge of $27.5 million during the fourth quarter of 2017, which is included in "Income tax expense (benefit)' in the consolidated statements of income (loss). This amount primarily consists of two components: (i) $12.8 million relating to the impairment of foreign tax credits, and (ii) a net $14.7 million charge resulting from the remeasurement of our deferred tax assets and liabilities in the U.S. based on the change in the U.S. federal corporate income tax rate.

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 net charge of $27.5 million is a reasonable estimate of the impact of the income tax effects of the Act on LivaNova as of 31 December 2017, 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.

Transfers of our shares may be subject to UK stamp duty or UK stamp duty reserve tax.

UK stamp duty and/or SDRT are imposed in the UK on certain transfers of or agreements to transfer chargeable securities (which include shares in companies incorporated in the UK) at a rate of 0.5% of the consideration paid for the transfer. Certain issues or transfers of shares to depositories or into clearance services, as discussed below, are charged at a higher rate of 1.5%.

Transfers of shares or agreements to transfer shares held in book entry form through the Depository Trust & Clearing Corporation should not be subject to UK stamp duty or SDRT in the UK A transfer of title in the shares or an agreement to transfer the shares from within the DTC system out of DTC and any subsequent transfers or agreements to transfer that occur entirely outside the DTC system, including our share repurchases, will generally be subject to UK stamp duty or SDRT at a rate of 0.5% of any consideration, which is payable by the transferee of the shares. Any such duty must be paid (and the relevant transfer document stamped by Her Majesty's Revenue & Customs) before the transfer can be registered in our books. If such shares are redeposited into the DTC system, the redeposit will attract UK stamp duty or SDRT at the higher 1.5% rate.

We have put in place arrangements to require that shares held in certificated form cannot be transferred into the DTC system until the transferor of the shares has first delivered the shares to a depository we have specified so that UK stamp duty or SDRT may be collected in connection with the initial delivery to the depository. Any such shares will be evidenced by a receipt issued by the depository. Before the transfer can be registered in our books, the transferor will also be required to put the depository in funds to settle the applicable UK stamp duty or SDRT, which will be charged at a rate of 1.5% of the value of the shares.

In HMRC's most recent guidance published on 23 July 2014, in response to the decisions in certain recent cases, HMRC has confirmed that it will no longer seek to apply the 1.5% UK stamp duty or SDRT charge when new shares of companies incorporated in the UK are first issued to a clearance service (or its nominee) or depositary (or its nominee or agent) anywhere in the world or are transferred to such an entity anywhere in the world as an integral part of an issue of share capital. Accordingly, we do not currently expect that UK stamp duty and/or SDRT will be imposed under current UK tax law and HMRC practice on future issue of our shares; however, it is possible that the UK government may change the relevant law in response to the cases referenced above, and that this may have a material effect on the cost of shares we issue and potentially on the cost of dealing in our shares. If our shares are not eligible for deposit and clearing within the facilities of DTC, then transactions in its securities may be disrupted.

The facilities of DTC are a widely-used mechanism that allows for rapid electronic transfers of securities between the participants in the DTC system, which include many large banks and brokerage firms. Our shares are at present, subject to certain conditions, generally eligible for deposit and clearing within the DTC system. However, DTC generally has discretion to cease to act as a depository and clearing agency for our shares. If DTC determines at any time that our shares are not eligible for continued deposit and clearance within its facilities, then we believe that our shares would not be eligible for continued listing on a U.S. securities exchange and trading in our shares would be disrupted. While we would pursue alternative arrangements to preserve the listing and maintain trading, any such disruption could have a material adverse effect on the trading price of our shares.

By order of the Board of Directors.

Damien McDonald
Chief Executive Officer & Director
26 April 2018

DIRECTORS' REPORT

The directors present their report together with the audited financial statements for the period ended 31 December 2017.

Directors

The directors of the Company, who held office in the year ended 31 December 2017 were as follows:

Chairman
Mr. Daniel J. Moore

Executive Director
Mr. Damien McDonald

Non-executive directors
Mr. Francesco Bianchi
Mr. Stefano Gianotti
Mr. Hugh Morrison
Mr. Alfred J. Novak
Dr. Sharon O'Kane
Dr. Arthur L. Rosenthal
Ms. Andrea Saia

Upon the resignation of Mr. Ballester as Chief Executive Officer and as an executive director with effect from 31 December 2016, Mr. Damien McDonald his successor as Chief Executive Officer was appointed by the Board as an executive director from 1 January 2017.

On 23 March 2018, Mr. Stefano Gianotti resigned from our Board with immediate effect in order to devote more time to his other business interests.

Pursuant to our articles of association, our directors were appointed for a term expiring at the 2018 AGM. We are thus holding director elections at this 2018 AGM. Subject to the articles of association, a director may be appointed by an ordinary resolution at a general meeting or by a decision of the Board.

Directors' indemnities

Each director is covered by appropriate directors' and officers' liability insurance, and there are also deeds of indemnity in place between the Company and each current and former director. These were executed in 2015 except for the deeds of indemnity in respect of Ms. Andrea Saia, who was appointed by the Board to fill a vacancy on 27 July 2016, and Mr. Damien McDonald, who was appointed by the Board effective 1 January 2017. These deeds were executed in 2016 and 2017, respectively. These deeds of indemnity provide for the Company to indemnify the directors in respect of any proceedings brought by third parties against them personally in their capacity as directors of the Company. The Company would also fund on-going costs in defending a legal action as they are incurred rather than after judgement has been given. In the event of an unsuccessful defence in an action against them in a criminal or civil action, individual directors would be liable to repay defence costs to the extent funded by the Company. In respect of any investigations or actions taken by a regulatory authority, individual directors would be liable to repay defence costs to the extent funded by the Company if that regulatory authority has determined that the relevant director has acted fraudulently, been grossly negligent, or has engaged in wilful misconduct in relation to that claim.

Company details and branches outside the UK

The Company is a public limited company incorporated in England and Wales with registered number 09451374. The Company's registered address is 20 Eastbourne Terrace, London, England W2 6LG.

The Company has one branch outside the UK: LivaNova PLC Filiale Italiana in Italy.

Share repurchases

There were no share repurchases by us in 2017.

Dividend

No dividend has been proposed during, or in respect of, the course of the year under review. There is no immediate intention for the Company to pay dividends. The declaration and payment by the Company of any future dividends and the amount of any such dividends will depend upon the Company's results, financial condition, future prospects, profits being available for distribution and any other factors deemed by the directors to be relevant at the time, subject always to the requirements of applicable law.

Political donations

The Company has not made any political donations, or incurred any political expenditure, in the period under review. In addition, the Company has not made any contributions to a non-EU political party during the period under review.

Greenhouse Gas Emissions (unaudited)

We report the carbon footprint of each of our Scope 1, 2 and 3 GHG emissions in tonnes of CO_2 equivalent from our business operations for the year ended 31 December 2017. Our focus is on the areas of largest environmental impact including manufacturing sites, warehouses, research and development sites and offices. Smaller locations are not included.

We report our emissions in three "scopes". Scope 1 figures are direct GHG emissions. Scope 2 emissions include electricity indirect GHG emissions. Scope 3 emissions are other indirect GHG emissions which include extraction and production of purchased materials and fuels; transport-related activities; electricity-related activities not included in Scope 2; leased assets, franchises and outsourced activities; use of sold products and services; and waste disposal.

Our measured sites included the following which include our headquarters, our European facilities and the Dominican Republic site of Santo Domingo:

- London HQ (United Kingdom)
- Clamart plant (France)
- Munich plant (Germany)
- Mirandola plant (Italy)
- Saluggia plant (Italy)
- Milan office building (Italy)
- Cantu' plant (Italy)
- Santo Domingo plant (Dominican Republic)

Metric tonnes of CO2		
	2017	**2016**
Scope 1 emissions (Direct)	4,544	7,269
Scope 2 emissions (Indirect)	19,447	24,598
Scope 3 emissions (Indirect)	37,528	59,761

Metric tonnes of CO2		
	2017	**2016**
Global emissions*	67,231	73,531
kg CO_2 per full time equivalent employee**	26.2	23.4

* Global emissions are distributed among the three scopes and are thereafter not equal to the sum of Scope 1, 2 and 3.

** Full time employees are those only at our measured sites: 2,722 in 2016 and 2,564 in 2017. While global emissions decreased, the number of employees at measured sites also decreased, resulting in an increase in this KPI.

Financial risk management objectives/policies and hedging arrangements

Please refer to *Note 3 — Financial Risk Management* in the consolidated Financial Statements for information on LivaNova's financial risk management objectives/policies and hedging arrangements.

Events since 31 December 2017

Acquisitions

For a discussion of our acquisition of each of ImThera on 16 January 2018 and TandemLife on 18 February 2018, and our signing on 8 March 2018 of an agreement with MicroPort for the sale by us of CRM to MicroPort, see our Strategic Report under "Acquisitions and Investments".

Divestitures

On 8 March 2018, we entered into a definitive Purchase Agreement with MicroPort Scientific Corporation for the sale of our CRM for $190.0 million. Completion of the transaction is subject to receipt of relevant regulatory approvals, including fulfilling the requirements of the Hong Kong Stock Exchange's Major Transaction requirements, and other customary closing conditions. We expect the transaction to close in the second quarter of 2018.

Resignation of director

On 23 March 2018, Mr. Stefano Gianotti resigned from the Board effective that same date in order to pursue his other business interests.

Future developments / Research and Development

Details of the activities of the Company in the field of research and development are set out in the Strategic Report.

Statement of disclosure to the UK statutory auditor

In accordance with section 418 of the Companies Act, each director at the date of this Directors' Report confirms that:

- so far as he or she is aware, there is no relevant audit information of which the Auditor is unaware; and
- he or she has taken all the steps he or she ought to have taken as director to make himself or herself aware of any relevant audit information and to establish that the Auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act.

Auditors

PricewaterhouseCoopers LLP has indicated its willingness to continue in office, and on the recommendation of the Audit and Compliance Committee and in accordance with section 489 of the Companies Act, a resolution to re-appoint it will be proposed at the 2018 AGM.

Directors' responsibility statement

The directors are responsible for preparing the UK Annual Report, the Directors' Remuneration Report and the financial statements in accordance with applicable law and regulations.

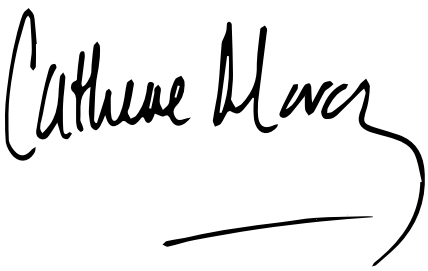
The Companies Act requires the directors to prepare financial statements for each financial year. The directors have prepared the LivaNova group and Company financial statements in accordance with IFRS as adopted by the European Union. Under the Companies Act, the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the LivaNova group and the Company, and of the profit or loss of the LivaNova group and the Company for that period. In preparing these financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable IFRS as adopted by the European Union have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the LivaNova group and the Company's transactions and disclose with reasonable accuracy at any time the financial position of the LivaNova group and the Company and enable them to ensure that the financial statements and the Directors' Remuneration Report comply with the Companies Act and, as regards the LivaNova group and the Company's financial statements, Article 4 of the IAS Regulation. They are also responsible for safeguarding the assets of LivaNova and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for the maintenance and integrity of the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

By order of the Board of Directors.



Catherine Moroz
Company Secretary
26 April 2018

Statement From the Chairman of the Compensation Committee

Dear Shareholder,

I am pleased to present the 2017 Directors' Remuneration Report of LivaNova, covering the period from 1 January 2017 to 31 December 2017. 2017 was our second full year as a public company. It was a year focused on bringing together a dedicated workforce of more than 4,500 employees worldwide and creating a solid foundation from which to drive future growth.

In 2017, the principal decisions in respect of director remuneration included:

- In February, the Compensation Committee approved the performance goals and compensation package for Damien McDonald, our only executive director. The Compensation Committee also approved the 2017 short-term incentive plan applicable to our executives, including Mr. McDonald and appointed Pearl Meyer as compensation advisors to the Committee for the 2017 financial reporting year.

- In April, the Compensation Committee approved the bonuses payable under the 2016 STIP for the Company's executive officers which included the Company's former chief executive officer, Mr. André-Michel Ballester.

- In May, the Compensation Committee approved annual equity awards under our Long-Term Incentive Plan to our executives and employees, including Mr. McDonald.

- In July, the Compensation Committee approved a procedure to verify the achievement of equity award performance and based on Company or Market performance indicators. The verification will apply going forward to all awards made to executives, including Mr. McDonald.

- In October, the Compensation Committee approved to make all grants of equity awards to executives including our executive director with an effective date of March 15, June 15, September 15 and December 15 of each year. It also recommended to the Board (and the Board in December subsequently approved) an amendment to the Company's Non-Employee Director Compensation Policy to re-allocate the cash and equity components of the non-employee directors' compensation so that they are equal in value.

- In December, the Board approved the annual equity awards for our non-executive directors. These awards are typically made shortly after the AGM but in 2017, the Company was in possession of material non-public information in respect of the divestiture of its CRM business franchise and only approved the awards on 11 December 2017 after the public release of that information. The Board also approved a supplemental award to reflect the 39% increase from $60.41 to $83.92 in the price of the Company's stock on Nasdaq from 5 August 2017 (the date when the prior equity awards vested) to 7 December 2017.

Our remuneration philosophy

During 2017, LivaNova's remuneration philosophy was rooted in the following principles:

- **Reward consistent and high-level performance** - to encourage directors to perform in a consistent, responsible way with the focus on long-term creation of value for LivaNova's shareholders;

- **Reinforce business strategy** - to reward directors for setting the business strategy on a path that enables strong execution by LivaNova's management team to achieve business objectives and strategic goals;

- **Stable fixed compensation** - to insulate director remuneration from business strategy decisions that might otherwise favour short-term strategy over long-term strategy, thereby to ensure that our director remuneration packages do not adversely influence business strategy; and

- **Competitive remuneration** - to recruit and retain the key talent, essential to the successful operation of LivaNova's business by ensuring that our remuneration packages are competitive with our market peers.

In forming its director remuneration philosophy, the Committee reviews the total compensation paid to our non-employee directors and non-executive Chairman of our Board. The purpose of the review is to ensure that the level of compensation is appropriate to attract and retain a diverse group of directors with the breadth of experience necessary to perform our Board's duties and to compensate our directors fairly for their services. The review includes the consideration of qualitative and comparative factors. To ensure directors are compensated relative to the scope of their responsibilities, the Compensation Committee considers: (i) the time and effort involved in preparing for Board and committee meetings and the additional duties assumed by committee chairs and the Chairman of our Board; (ii) the level of continuing education required to remain informed of broad corporate governance trends and material developments relevant to strategic initiatives within our company; (iii) the risks associated with fulfilling fiduciary duties; and (iv) the compensation paid to directors at a peer group of companies as determined by the Committee's compensation consultant.

As Chairman of the Compensation Committee, I am committed to ensuring an open dialogue with our shareholders. If you have any questions about remuneration generally, or the presentation or the content of this report, please contact me via mail sent to the Company Secretary, LivaNova PLC, 20 Eastbourne Terrace, London W2 6LG, United Kingdom.

Arthur Rosenthal, Ph.D.
Chairman of the Compensation Committee
26 April 2018

Introduction

The Compensation Committee presents this remuneration report which will be put to shareholders as an advisory vote at the 2018 AGM. Some of the information contained in the annual remuneration report is subject to audit. Where the information is subject to audit, this is identified in the relevant heading.

Activities of the Compensation Committee in 2017 and Since Year End

The Chairman of the Compensation Committee is Arthur L. Rosenthal, Ph.D., and the other members of the Compensation Committee are Alfred J. Novak and Francesco Bianchi, all of whom are non-executive directors that the Company considers to be independent and all have served on the Committee since 19 October 2015. The Committee's terms of reference are available on the Company's website at *www.livanova.com*.

The Compensation Committee has the sole authority to retain and terminate a compensation consultant to assist with its responsibilities, as well as the sole authority to approve the consultant's fees, which are then paid by the Company (within any budgetary constraints imposed by the Board). Our officers do not discuss compensation matters with the Compensation Committee's consultant, except as needed to respond to questions from the consultant. The Compensation Committee's consultant does not provide services for the Company or any of our officers. Since 2016, the Compensation Committee has engaged the services of Pearl Meyer & Partners, LLC, an experienced compensation consulting firm, to advise the committee on executive compensation matters. The Compensation Committee selected Pearl Meyer based on its global expertise The Committee considered the following factors and determined that Pearl Meyer is an independent and conflict-free advisor to the Company:

- the provision of other services to the Company by the advisor's employer;
- the amount of fees received from the Company by the advisor's employer, as a percentage of the total revenue of the advisor's employer;
- the policies and procedures of the advisor's employer that are designed to prevent conflicts of interest;
- any business or personal relationship of the advisor with a member of the Committee;
- any stock of the Company owned by the advisor; and
- any business or personal relationship of the advisor or the advisor's employer with an executive officer of the Company.

In 2017, Pearl Meyer provided support on the following projects:

- director compensation analysis and benchmarking
- peer group analysis
- executive equity compensation analysis

The Company paid Pearl Meyer a total of $52,863 for the services indicated above for 2017, computed on the basis of Pearl Meyer's hourly rates for services rendered, multiplied by the number of hours required to generate the reports and including administrative service fees.

Remuneration details for the period ended 31 December 2017

Single total figure on remuneration - executive director - audited information

The table below sets out for the Company's sole executive director, Damien McDonald, the single figure of his remuneration for the period ended 31 December 2017.

This comprises the total remuneration received over the full year from 1 January 2017 to 31 December 2017.

	Basic Salary and Fees ($'000)	Taxable Benefits ($'000)	Annual Bonus ($'000)	Service-Based Awards ($'000)	Long-Term Incentive Awards ($'000)	Pension Contributions ($'000)	Total ($'000)
Damien McDonald - 2017	848	1,154	848	1,423	4,397	215	8,885

(1) The currency conversion rates used are for 2017-£/$ =1.28864 (average currency rate for the period 1 January 2017 to 31 December 2017).

Salary and benefits - executive director - audited information

In 2017, Damien McDonald was paid a base salary of £658,000 per annum ($ 847,925). The taxable benefits column line for Damien McDonald includes: (i) the accommodation allowance of £150,000 ($193,296), the car allowance of £17,749 ($22,873), (ii) school allowance of £31,950 ($41,172), (iii) health insurance of £17,339 ($22,344), (iv) relocation agency services of £6,115 ($7,881), (v) reimbursement for house selling related costs of £356,250 ($459,078) and (vi) related Gross Up of £315,919 ($407,106).

Pension contributions - executive director - audited information
In 2017, the Company paid a cash in lieu of pension allowance equal to 15 per cent of Damien McDonald's compensation (base salary and bonus). The Company plan provides for the employee the possibility to opt for either cash (with a 13.8 per cent penalty) or pension contribution. For 2017, Damien McDonald opted to receive the amount in cash, net of related income tax and employee national insurance contributions.

Bonus payments - executive director - audited information
In April 2018, Damien McDonald received £658,132 ($848,095), an amount equal to 100.1% of his 2017 bonus opportunity under the 2017 Short-Term Incentive Plan ("STIP"). The performance objectives selected by the Committee for the 2017 bonus plan were as follows:

	Percentage of Target Bonus
Adjusted net sales objective	60%
Adjusted net profit objective	40%
Achievement of both performance objectives	**100%**

The performance objectives for the bonus program included an adjusted net sales objective, which was the adjusted net sales as reported by the Company at the Company's budgeted currency exchange rates, and an adjusted net profit objective, which was the adjusted non-GAAP (U.S. generally accepted accounting principles) net profit as reported by the Company.

The percentage achievement of the performance objectives was subject to scaling down or up by 2 per cent for each 1 per cent, or portion thereof, of underachievement or overachievement, respectively, between an underachievement of at least 80 per cent and an overachievement of up to 125 per cent.

Given 2017 adjusted net sales of $1,241.7 million in respect of a target of $1,263.6 (98.3%) and adjusted net profit of $171.8 million in respect of a target of $169.4 million (103.1%), the 2017 bonus would have resulted in a 93.3% pay-out under the terms of the plan approved by the Compensation Committee at the outset of 2017.

Due to the anomalous performance of CRM as compared to our overall performance in 2017 and due to the focus in 2017 on the sale of CRM to a third party (a binding letter of intent was announced in November 2017), the Compensation Committee exercised its discretion to exclude the financial performance of CRM from the calculations. In addition, the Committee made an incremental payment of £3,948 to Mr. McDonald to match the percentage of base salary paid to the other named executive officers resulting in individual increases in payout under the 2017 STIP of between 4.9% and 7.2%.

Long-term incentive awards - executive director - audited information

On 5 May 2017, the Committee approved an award of RSUs to Damien McDonald under the LivaNova 2015 Incentive Award Plan having a date of grant value of $3.0 million, which could result in him receiving up to 53,409 Ordinary Shares.

These RSUs were to vest and the forfeiture restrictions thereon to lapse as follows:

- If the closing stock price on the Nasdaq of an Ordinary Share of Company's stock on the date two days after the Company announces its 2017 financial results, including the day of pre-market earnings release as the first such day, (the "Measure Price") was less than $57.50, all RSUs would lapse and be forfeited;

- If the Measure Price was equal to $57.50, one-third of the RSUs would have been eligible for vesting;

- If the Measure Price was equal to or greater than $67.50, all of the RSUs would have been eligible for vesting;

- If the Measure Price felt between $57.50 and $67.50, the number of RSU's eligible for vesting would have been equal to the sum of (i) one-third of the RSUs, plus (ii) that portion of the remaining two-thirds of the RSUs determined by linear interpolation (the difference between the Measure Price and $57.50, divided by $10.00, and then multiplied by the number constituting two-thirds of the RSUs);

- In each case, 25% of the RSUs eligible for vesting would have vested on the Measure Date, and 25% of the RSUs eligible for vesting shall vest on each of the first three anniversaries of the Measure Date.

Given the fact the Measure Price (i.e. the closing stock price on the Nasdaq of an ordinary share of Company's stock on 1 March 2018) was $89.57, all market-based RSUs became eligible to vest. 25% (13,353 RSUs) vested on 1 March 2018 (for a value of $1,196,028) and the remaining 75% (40,056 RSUs for a total theoretical value of $3,201,276 as of 31 December 2017, given the market price at this date of $79.92) will vest in three equal instalments on each of the first anniversaries of the Measure Date.

Service based awards - executive director - audited information

On 5 May 2017, Damien McDonald was granted 17,803 service-based RSUs from the Plan over Shares equal in value to $1.0 million that would vest 25% per year on each of the first four anniversaries of 5 May 2017. Their value as of 31 December 2017, given the market price at this date of $79.92, is $1,423,816

Additional information not included in the table - executive director - not audited information

On 4 November 2016, Damien McDonald was granted 66,979 service-based RSUs and 174,227 Stock Appreciation Right as an inducement award to vest in equal tranches at each anniversary of the four anniversaries of the grant date. The first tranche vested on 4 November 2017. These values are not reported in the table as they represent 2016 remuneration, being "service-based" awards.

Single total figure on remuneration - Chairman and non-executive directors - audited information

The table below sets out for the Company’s non-executive Chairman and each of the Company’s non-executive directors the single figure of his or her remuneration for the period ended 31 December 2017. This comprises the total remuneration received since 1 January 2017.

As the Board was unable to approve the Annual Award on 5 August 2017 due to the Company’s possession at the time of material non-public information, on 15 December 2017, an amended policy setting a specific date, June 15 of each year, for approval of Annual Awards (without regard as to whether the Company is in possession of material non-public information) was adopted. In addition the Board on the same date approved an Annual Award, vesting in one year, with a value prorated for the period between 5 August 2017 and 15 June 2018, in addition to a Supplemental Award to captures the benefit of the increase in share price between 5 August 2017 and 7 December 2017 lost due to the delay in approving the awards (between 5 August 2017 and 7 December 2017, the closing price of an ordinary share of the Company’s stock on the Nasdaq increased by 39% from $60.41 to $83.92, resulting in a substantial decrease in the number of shares to be awarded on 15 December 2017 as compared to the number of shares that would have been awarded on 5 August 2017).

	Basic Annual Fee ($'000)		Additional Fee for Acting as Chairman, Chair of Committee or Member of Committee ($'000)		Taxable Benefits ($'000)(1)		Total Emoluments ($'000)		Service-Based Share Awards ($'000)		Total ($'000)	
Current directors	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Daniel J. Moore	85	60	67	60	3	2	155	122	232	317	387	439
Hugh Morrison	85	60	36	45	2	3	123	108	138	201	261	309
Alfred J. Novak	85	60	23	23	2	2	110	85	138	203	248	288
Arthur L. Rosenthal	85	60	20	20	1	2	106	82	138	203	244	285
Francesco Bianchi	85	60	23	23	1	—	109	83	138	203	247	286
Stefano Gianotti	85	60	6	6		5	91	71	138	203	229	274
Sharon O'Kane	85	60	15	6	1	4	101	70	138	203	239	273
Andrea Saia	85	26	15	6	1	—	101	32	138	164	239	196

(1) The amounts refer to expenses reimbursement for the Directors to exercise their role that are considered taxable under UK tax legislation.

On 15 December 2017, the non-executive directors listed above received RSU awards pursuant to the Incentive Award Plan. The RSUs are subject to time-based vesting and will vest on the first anniversary of the date of grant.

Scheme interests awarded during the financial year - audited information

The following table sets out details of scheme interests awarded to Damien McDonald and the Company's non-executive directors since 1 January 2017 pursuant to the Incentive Award Plan.

Director	Award Type	Basis of Award	Face Value of Award ($)(1)	No. of Shares Subject to the Award	Exercise Price ($)	Closing Share Price on Date of Award (For Face Value Calculation) ($)	% of scheme interests achievable on minimum performance	Expiry of Performance Period	Performance Criteria
Damien McDonald	RSUs	2015 Incentive Award Plan	2,249,946	40,056	N/A	56.17	—	March 1, 2017	Market base criteria met in 2017. Time-base vesting
Damien McDonald(2)	RSUs	2015 Incentive Award Plan	750.207	13,356	N/A	56.17	—	March 1, 2017	Market base criteria met in 2017. Time-base vesting. This first Tranche vested March 1, 2018
Damien McDonald	RSUs	2015 Incentive Award Plan	999,995	17,803	N/A	56.17	—	N/A	Time-Based Vesting
Daniel J. Moore	RSUs	2015 Incentive Award Plan	231,550	2,885	N/A	80.26	—	N/A	Time-Based Vesting
Hugh Morrison	RSUs	2015 Incentive Award Plan	137,646	1,715	N/A	80.26	—	N/A	Time-Based Vesting
Alfred J. Novak	RSUs	2015 Incentive Award Plan	137,646	1,715	N/A	80.26	—	N/A	Time-Based Vesting
Arthur L. Rosenthal	RSUs	2015 Incentive Award Plan	137,646	1,715	N/A	80.26	—	N/A	Time-Based Vesting
Francesco Bianchi	RSUs	2015 Incentive Award Plan	137,646	1,715	N/A	80.26	—	N/A	Time-Based Vesting
Stefano Gianotti	RSUs	2015 Incentive Award Plan	137,646	1,715	N/A	80.26	—	N/A	Time-Based Vesting
Sharon O'Kane	RSUs	2015 Incentive Award Plan	137,646	1,715	N/A	80.26	—	N/A	Time-Based Vesting
Andrea Saia	RSUs	2015 Incentive Award Plan	137,646	1,715	N/A	80.26	—	N/A	Time-Based Vesting

(1) Face value of RSUs award calculated using the closing market price of LivaNova share on the Nasdaq at the date of grant.

(2) These shares vested on March 1, 2018 (first tranche of the total shares granted of 53,4096 on May 5, 2017).

How the remuneration policy will be applied in the year ending 31 December 2018

Salary and benefits - executive director

On 15 March 2018, the Committee approved adjustments to the base salaries to Damien McDonald's base salary, effective since 1 April 2018. The base salary increased by 11% from £ 658,000 to £ 731,500. The increase have been approved following the analysis of benchmarking data provided by the Committee's independent consultant, Pearl Meyer & Partners, LLC, that were showing that Mr. McDonald's target total cash (i.e. base salary plus target variable short -term incentive) ranked at the 64th percentile in the UK data and 65th percentile in the US data.

Bonus payments – executive director

On 9 February 2018, the Compensation Committee approved the 2018 annual Short-Term Incentive Plan (the "2018 STIP"). Damien McDonald is eligible to participate in the 2018 STIP and his target bonus for 2018 is 100 per cent of his weighted base salary of the year. The amount of his bonus will be determined by multiplying the percentage achievement under the 2018 performance objectives, as described below, by such target amount. The performance objectives selected by the Committee for 2018 are as follows:

	Percentage of Target Bonus
Adjusted net sales objective	60%
Adjusted net profit objective	40%
Achievement of both performance objectives	**100%**

“Net Sales” is defined as our net sales for 2018 at budgeted currency exchange rates, excluding net sales from our CRM, ImThera Medical, Inc. and any acquisitions in 2018. “Adjusted Net Income” is defined as our non-GAAP net income at reported currency exchange rates, after adjustments for our CRM Franchise, and the effects of acquisitions, divestitures, restructuring, integration, purchase price allocation and intangible amortization, special items, including 3T Heater Cooler remediation and significant and unusual litigation, and equity compensation.

Given that 2018 adjusted net sales and adjusted net profit are key measures of company value, the Board considers the actual target amounts of both objectives to be too commercially sensitive for disclosure at this time. The Committee will disclose the target amounts after the publication of the Company’s 2018 financial results.

The percentage achievement of the performance objectives will be scaled down by 16.67 per cent for each 1 per cent, or portion thereof of underachievement, or up by 7.5 per cent for each 1 per cent, or portion thereof, of overachievement, respectively, between an underachievement of at least 97 per cent and an overachievement of up to 125 per cent. Applying this scaling factor to the performance objectives, individual bonuses can range from a low of 0 per cent to a high of 175 per cent of an executive officer’s target bonus amount.

Long Term Incentive – executive director

On 15 March 2018, the Compensation Committee approved our 2018 annual Long-Term Incentive Program. Pursuant to the 2018 LTIP, the Committee granted Damien McDonald an equity award with a value of $4,500,000. One-fourth of the Award Value is allocated to each of four different types of equity awards, as explained below:

Service-Based Restricted Stock Units - executive director

Damien McDonald received an award of service-based RSUs vesting in equal or substantially equal amounts on each of the first four anniversaries of the grant date. The Committee determined the number of RSUs awarded by dividing one-fourth of the Award Value by the most recent closing price of an ordinary share of our stock on the Nasdaq as of the grant date and rounding down to the nearest whole unit.

Stock Appreciation Rights

Damien McDonald received an award of stock appreciation rights vesting in equal or substantially equal amounts on each of the first four anniversaries of the grant date. The Committee determined the number of SARs awarded to each participant by dividing one-

fourth of the Award Value by the Black-Scholes value of a SAR based on the Closing Price and rounding down to the nearest whole right.

Relative Total Shareholder Return Performance Stock Units

Damien McDonald received an award of performance stock units subject to a relative total shareholder return market condition. The Committee determined the number of PSUs awarded to each participant by dividing one-fourth of the Award Value by the Closing Price and rounding down to the nearest whole unit. At the end of calendar year 2020, our TSR for the three-year period 2018 through 2020 will be compared to the TSR for a peer group of 27 companies selected by the Committee on the advice of its compensation consultant, Pearl Meyer & Partners, and the number of shares of our stock actually delivered to the participants will be determined by the following chart, with linear interpolation applied between specified levels:

TSR Performance Percentile Rank	Percent Payout
≥90th	200%
80th	150%
50th	100%
30th	40%
<30th	0%

The 2018 rTSR Peer Group includes:

ABIOMED, Inc.
Baxter International Inc.
Becton, Dickinson and Company
Boston Scientific Corporation
Cantel Medical Corp.
CONMED Corporation
DexCom, Inc.
Edwards Lifesciences Corporation
Globus Medical, Inc.
Haemonetics Corporation
Hill-Rom Holdings, Inc.
Hologic, Inc.
Integer Holdings Corporation
Integra LifeSciences Holdings Corp.
Intuitive Surgical, Inc.
Invacare Corporation
Masimo Corporation
Medtronic plc
NuVasive, Inc.
ResMed Inc.
Smith & Nephew plc
Steris Plc
Stryker Corporation
Teleflex Incorporated
Varian Medical Systems, Inc.
Wright Medical Group N.V.
Zimmer Biomet Holdings, Inc.

The following parameters will be used to determine rTSR for the three-year period ending 31 December 2020:

- Stock Price: 30 trading-day average closing prices as of the beginning and end of the performance period;
- Dividend Treatment: Dividend reinvestment approach (using ex-dividend date);
- Relative Performance Measurement:
- Calculate cumulative TSR for LivaNova and each of the benchmark companies,
- Compute LivaNova's discrete percentile rank, which is inclusive of LivaNova's TSR (Excel: *PERCENTRANK* function); and
- Benchmark Group Governance:
- Measured against benchmark group at the beginning of the performance period,
- Companies acquired or delisted during the performance period are excluded.

Three-Year Cumulative Adjusted Free Cash Flow Performance Stock Units

Damien McDonald received an award of PSUs subject to achievement of a three-year cumulative adjusted free cash flow target. The Committee determined the number of PSUs awarded to each participant by dividing one-fourth of the Award Value by the Closing Price and rounding down to the nearest whole unit. At the end of calendar year 2020, cumulative adjusted free cash flow for the period 2018 through 2020 will be compared to the FCF Target, and the number of shares of our stock actually delivered to the participants will be determined by the following chart, with linear interpolation applied between specified levels:

FCF Achievement Relative to FCF Target	Percent Payout
≥150%	200%
125%	150%
100%	100%
60%	20%
<60%	0%

"Adjusted Free Cash Flow" is defined as our reported cash flow from operating activities minus our reported capital expenditures and excludes cash flows associated with restructuring, integration, acquisitions, divestitures, 3-T heater cooler product remediation and significant and unusual litigation.

Chairman and non-executive directors' fees

As a result of the amendment on 20 May 2017 and 15 December 2017, the Company's non-employee director compensation policy provides that each non-executive director will receive the following fees and awards for 2018:

- a cash retainer in respect of Broad service of $110,000, plus an additional $75,000 for the Chairman;
- an additional cash retainer of $15,000 for each member of the Audit and Compliance Committee, plus an additional $15,000 for the chairperson of the committee;
- an additional cash retainer of $8,000 for each member of the Compensation Committee, plus an additional $12,000 for the chairperson of the Committee;
- an additional cash retainer of $6,000 for each member of the Nominating and Governance Committee, plus an additional $9,000 for the chairperson of the Committee; and
- an annual award of RSUs, granted on 15 June 2018 and vesting on 15 June 2019, having a value of $185,000, plus an additional value of $110,000 for the Chairman.

Percentage change in remuneration of the Chief Executive Officer

The table below reflects a comparison between the percentage change in remuneration of the Chief Executive Officer between 2017 and 2016 in comparison with the other employees.

	Base salary change %	Benefits change %	Annual Cash Bonus change %
Chief Executive Officer	14%	259%	84%
Average for all employees	3%	22%	3%

In December 2016, Mr. André-Michel Ballester resigned his position as chief executive officer, and in January 2017, Mr. McDonald assumed the role of chief executive officer. Accordingly, the table above reflects a comparison of Mr. Ballester's remuneration in 2016 with Mr. McDonald's remuneration in 2017. The change in benefits reflects a one-time reimbursement of expenses related to Mr. McDonald's purchase of a principal residence in the U.K. of £356,250 ($459,078), coupled with a gross up in the amount of £315,919 ($407,106) for taxes.

By comparison, the other employees received an average base salary increase of three percent. The U.K.-based employees received an average taxable benefit increase of 22%. Employees in countries outside the U.K. are excluded from this comparison given the many variations in benefits across different countries. Finally, the other employees received an average increase in annual bonus of three percent.

Payments made to past directors - audited information

The Company made payments to André-Michel Ballester and Brian Sheridan who are no longer directors in 2017.
The Company paid Mr. Ballester a total of 282,211 GBP in 2017 for consultancy fees and expenses. The Company paid Mr. Sheridan 50,000 EURO in 2017 for consultancy fees.

Payments made for loss of office - audited information
The Company made no payments for loss of office in the period under review.

Summary of share ownership guidelines - audited information

The Company has a voluntary share ownership guideline in place for its officers and directors. The directors believe that meaningful ownership of equity in the Company is an essential element in demonstrating the commitment of its leadership to its primary task of creating value for its shareholders. To further this belief, equity award programs have been established as part of the overall compensation plans for both officers and directors. Awards under these plans are made at levels that not only compensate such individuals at a competitive level in the marketplace, but also present an opportunity to accumulate equity in the Company. The following guidelines represent minimum amounts of equity ownership in the Company expected to be achieved by the later of (i) 31 December 2018 (approximately three years after the date of approval of the policy), and (ii) five years after the date an individual becomes a corporate officer or director. Although attainment of these ownership guidelines is voluntary, lack of attainment may be a factor considered by the Committee in approving future awards. At the end of the three-year phase-in period and on the last day of each financial year thereafter, the market value of equity holdings in the Company is encouraged to be at least:

- Chief executive officer: five times base salary
- Officers holding the role of vice president or senior vice president: three times base salary
- Non-executive directors five times a director's annual cash retainer

Qualifying equity ownership includes:

- common stock owned by the individual or held individually by or jointly with the individual's spouse or children (valued at the closing price of the Company's stock on the relevant measurement date);
- all unvested RSUs or shares of restricted stock owned by the individual (valued at the closing price of the Company's shares on the measurement date on Nasdaq, minus an estimated tax expense of 40 per cent); and
- all in-the-money, vested, unexercised SARs or stock options (valued at the closing price of the Company's Ordinary Shares on the relevant measurement date, minus the exercise price, and minus an estimated tax expense of 40 per cent.)

None of our directors has reached an initial measurement date yet and so thus none has failed to comply with the voluntary guidelines. However, as at 19 April 2018, four of our eight directors (including our one executive director) had already met the voluntary ownership target in advance of the initial measurement date.

Directors' interests in Ordinary Shares and options/awards in respect of Ordinary Shares- audited information

The table below sets out the total number of interests in the Company's shares as at 31 December 2017. In addition to the number included in the table, an additional 2,586 Ordinary Shares are held by the DJM Family Partnership Ltd in which Mr. Daniel J. Moore has an indirect interest.

Director	Ordinary Shares	Ordinary Shares Underlying Stock Options	Ordinary Shares Underlying SARs	Ordinary Shares Underlying RSUs
Damien McDonald [1]	11,136	—	174,227	121,446
Daniel J. Moore [2]	54,296	103,249	—	2,885
Hugh Morrison	2,000	—	—	1,715
Alfred J. Novak	11,850	—	—	1,715
Arthur L. Rosenthal	17,095	—	—	1,715
Francesco Bianchi	1,830	—	—	1,715
Stefano Gianotti	1,830	—	—	1,715
Sharon O'Kane	2,764	—	—	1,715
Andrea Saia	1,478	—	—	1,715

(1) Of the 121,446 shares underlying RSUs, the vesting of 53,409 RSUs were subject to the achievement of performance conditions.

(2) The 103,249 Ordinary Shares underlying Stock Options are 46,626 stock options with an exercise price of $51.90 and 56,623 Stock options with an exercise price of $57.39 granted respectively on 15 June 2013 and 15 June 2014 by Cyberonics Inc. and then converted in LivaNova Stock options on 19 October 2015, date of the merger of Sorin S.p.a. and Cyberonics Inc. that resulted into LivaNova PLC.

Relative importance of spend on pay

The following table sets out the total amounts spent in the year ended 31 December 2017 and the year ended 31 December 2016 on remuneration paid to employees and distributions to shareholders.

$ thousands	Year Ended 31 December 2017	Year Ended 31 December 2016	% change
Employee remuneration [1]	402,891	372,578	8 %
Share buybacks	Nil	49,987	(100)%
Dividend	Nil	Nil	—

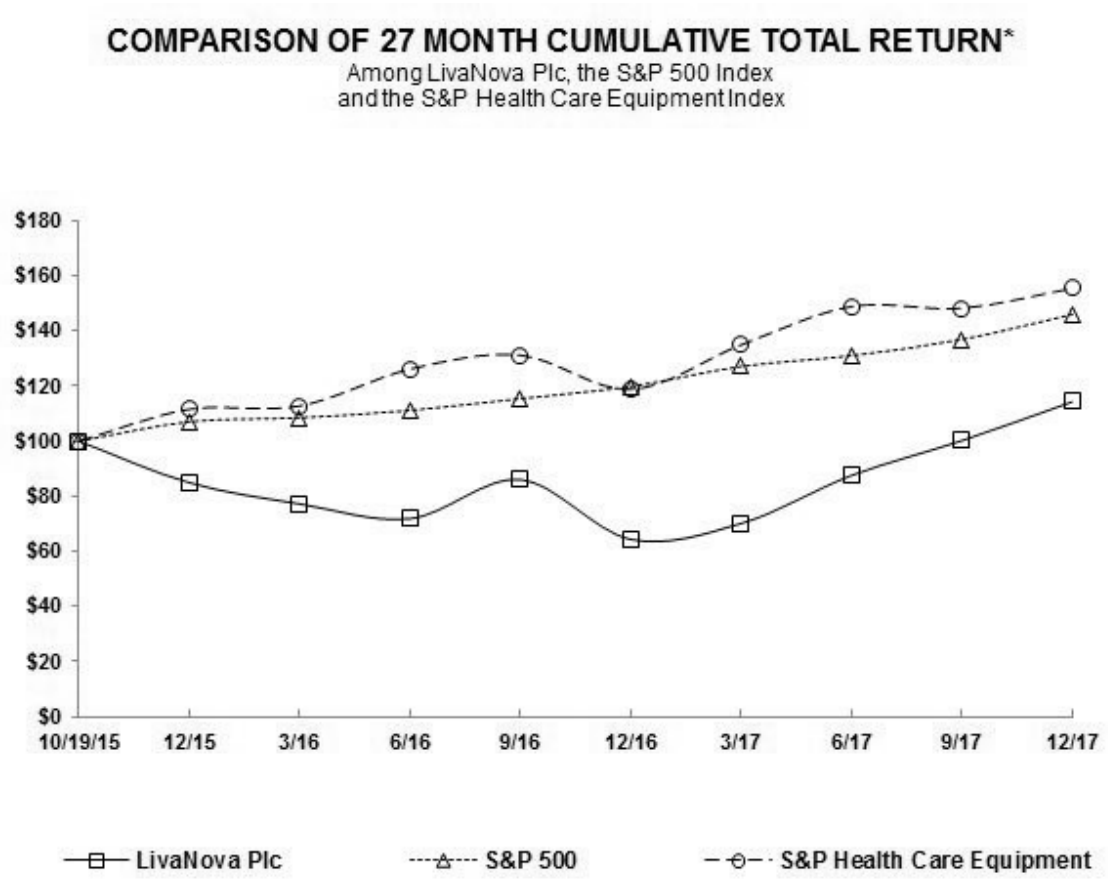
(1) The Employee remuneration does not include the spend on pay related to employees in the CRM business franchise that are reflected as a component of the discontinued operations.

Total shareholder return

Performance graph

The graph below shows the Company's performance measured through total shareholder return on a holding of $100 in the Company's shares between 1 January 2017 and 31 December 2017, compared to the S&P 500 Index and the S&P Healthcare Equipment Index. LivaNova chooses these indices as it felt they provided both a broader market benchmark together with a more proximate industry benchmark.

In addition, Mr. Ballester received 2,171 RSU shares and 17,835 shares, in relation to the vesting of the restricted stock units respectively granted on March 11, 2016 and November 18, 2016.



CEO Total Compensation

	Year Ended 31 December 2017	Year Ended 31 December 2016
Total single-figure remuneration (thousands $)	8,885	1,968
Annual bonus award (as a % of maximum)	57	53.3
Vesting of long term performance awards (as a % of maximum)	100	25

Statement of Voting at Prior AGMs

The remuneration policy was last approved by shareholders at the 2016 AGM held on 16 June 2016 and can be inspected at the Company's website: http://investor.livanova.com by clicking on "Financial Information" and then "Annual Reports & Proxies". The remuneration policy is set out on pages 63 to 75 of the directors' remuneration report within the 2015 Annual Report and accounts for the period ended 31 December 2015. We will next bring a remuneration policy to shareholders for approval in 2019. The results of the binding vote to approve the remuneration policy in 2016 were as follows:

	For (Number of Votes)	Per cent For (%)	Against (Number of Votes)	Per cent Against (%)	Total Votes Validly Cast	Total Votes Validly Cast as a Percentage of Shares in Issue	Abstentions (Number of Votes)
To approve the directors' remuneration policy	32,806,406	87.84	2,699,096	7.22	35,505,502	72.35	1,842,015

At the 2017AGM held on 14 June 2017, votes on the advisory vote to approve the directors' remuneration report were as follows:

	For (Number of Votes)	Per cent For (%)	Against (Number of Votes)	Per cent Against (%)	Total Votes Validly Cast	Total Votes Validly Cast as a Percentage of Shares in Issue	Abstentions (Number of Votes)
To approve the directors' remuneration report	29,346,001	87.40	4,231,992	12.60	33,577,993	69.68	25,961

By order of the Board of Directors.

Arthur Rosenthal, Ph.D.
Chairman of the Compensation Committee
26 April 2018

Independent auditors' report to the members of LivaNova PLC

Report on the audit of the financial statements

Opinion

In our opinion:

- LivaNova PLC's Group financial statements and Company financial statements (the "financial statements") give a true and fair view of the state of the Group's and of the Company's affairs as at 31 December 2017 and of the Group's profit, the Company's loss and the Group's cash flows for the year then ended;
- the Group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law); and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report, which comprise: the Consolidated and Company balance sheets as at 31 December 2017; the Consolidated statements of income (loss) and the Company statement of (loss) income; the Consolidated statements of comprehensive income (loss) and Company statement of comprehensive income; the Consolidated statements of cash flows, and the Consolidated and Company statements of changes in equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Basis for opinion

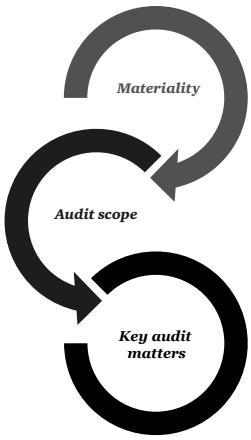
We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Our audit approach

Overview



- Overall Group materiality: $7.5 million (2016: $7.2 million), based on approximately 5% of profit before tax adjusted for:
  - Impairment of CRM upon classification as held for sale;
  - Expenses arising from the 3T Heater/Cooler Remediation, made up of exceptional items of $7.2m and operating expenses of $7.8m;
  - Restructuring and integration costs;
  - Acquisition costs in respect of Caisson and the gain recognised on the minority investment prior to full acquisition;
  - Losses from equity investments in associates; and
  - Impairment of cost method investments

- The Group operates through its 3 business franchises across over 100 countries. Our audit focuses on the 16 largest components through a combination of both full scope and directed scope entities.
- The territories where we conducted audit procedures, together with work performed at corporate functions and consolidated Group level, accounted for approximately: 92% of the Group's revenue and 91% of the Group's profit before tax.

- Business Combination - Caisson (Key Audit Matter for Group).
- Impairment of CRM business franchise (Key Audit Matter for Group and Company).
- Held for sale accounting - CRM (Key Audit Matter for Group).
- 3T Heater Cooler Provision (Key Audit Matter for Group and Company).

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain.

As in all of our audits we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

Key audit matter	*How our audit addressed the key audit matter*
Business Combination - Caisson In May 2017, LivaNova announced it had acquired the remaining outstanding 51% interest in Caisson Interventional, LLC ('Caisson'), in support of LivaNova's strategic growth initiatives. LivaNova has been an investor in Caisson since 2012 and total consideration of $72m was agreed, net of $6m of debt forgiveness for the additional 51%. An initial payment of $18m was made on completion of the deal, with the remaining payments to be made dependent on regulatory approvals and sales earn outs. As a result of the acquisition, LivaNova recognised a pre-tax gain of $38.1m representing the gain on the book value of its existing investment in Caisson. *Applicable to Group*	We gained an understanding of the process undertaken by management in respect of the acquisition of Caisson including understanding, evaluating and testing the design and operating effectiveness of key controls over the process. We obtained and reviewed evidence of the business combination including reviewing the signed sale agreement, receipt of consideration and minutes of board approval. We also reviewed management's business combination memorandum, which included significant judgments and assumptions taken which principally related to the valuation of the acquired intangibles including discount rate and valuation of earn out awards. We obtained and audited the valuation of the acquired assets and assumed liabilities, including previous equity interest, with the assistance of our valuation specialists. Additionally, we reviewed the adequacy and appropriateness of the acquisition disclosures within the financial statements. We noted no material exceptions through performing these procedures.
Impairment of Cardiac Rhythm Management ('CRM') business franchise The agreed sale price of the CRM cash-generating unit ('CGU') has provided an indicative fair value of CRM of $181m. This value is below the carrying value of the CGU and as such management has recorded an impairment provision of $37m during the year against the customer relationship intangible asset and developed technology within the CRM business. In the prior year a charge of $72m was recorded within the CRM CGU, impairing the full goodwill balance and reducing the customer relationship intangible asset and developed technology down to their respective fair values. We have focused on this audit matter because of the size of the impairment charge and the judgement associated with allocating the charge to the relevant assets. Additionally, an impairment of $89m has been recorded in the Company in respect of its investment in Sorin CRM SAS, based on the expected fair value less costs of disposal. *Applicable to Group and Company*	Our audit has focused on understanding the proposal for the sale of the business and obtaining third party evidence in the form of an agreed letter of intent to support the fair value of the CRM business. We have audited management's impairment calculation, and focussed on the allocation of the impairment charge which was recorded against the customer relationship intangible asset and developed technology prior to reclassification of the assets and liabilities of CRM into a held for sale disposal group. We have also considered the level of disclosure of the impairment within both the Group and Company financial statements. We noted no material exceptions through performing these procedures.

Key audit matter	*How our audit addressed the key audit matter*
Held for sale accounting - CRM The CRM business franchise has met the held for sale and discontinued operations criteria set out under IFRS 5 on the basis that the board is committed to a sale, management has been actively marketing the business for sale to a potential buyer at a market price and this strategy is unlikely to change. Additionally, management anticipates that the sale will complete within 12 months of the balance sheet date. As at the balance sheet date a potential acquirer has been identified and signed letter of intent obtained. The CRM business is also considered individually significant as it represents its own cash generating unit, and accordingly has been classified as a discontinued operation and separately presented on the face of the primary financial statements. Assets of $243m and liabilities of $76m have been presented separately as assets and liabilities of discontinued operations on the balance sheet at 31 December 2017. Profit of $5m has also been presented as discontinued. We have focused on this audit matter as a result of the material impact that the held for sale and discontinued operations accounting have had on the 2017 financial statements of LivaNova PLC. *Applicable to Group*	We have obtained and evaluated both internal and external supporting evidence to determine that the held for sale criteria have been met. We also considered management's calculations including the completeness of CRM related businesses contained within the disposal group of assets and the valuation of the assets and liabilities of CRM held within the disposal group. We have agreed this to historical carrying values audited in previous periods and to third party evidence including valuation specialists where appropriate. We have also assessed the appropriateness of the disclosures in respect of the held for sale and discontinued operations accounting. We have also corroborated the amounts disclosed to those contained in previous segment reporting and the stand-alone carve out accounts produced as part of the disposal. We noted no material exceptions through performing these procedures.
3T Heater Cooler Provision As set out in more detail on page 125, in response to the FDA Warning Letter, in the fourth quarter of 2016 LivaNova initiated a program to provide existing 3T device users with new loaner devices at no charge pending regulatory approval and implementation of an additional worldwide risk mitigation strategy. LivaNova is also currently implementing a vacuum and sealing upgrade program throughout 2018 and beyond until all devices are upgraded and will perform a no-charge deep disinfection service for 3T device users who have reported confirmed M. chimaera mycobacterium contamination. • The Group maintains a provision for the future costs associated with this product remediation plan, which at 31 December 2017 was $27.5m (2016: $33.5m). • The calculation of this provision is subject to significant estimation uncertainty, particularly regarding assumptions relating to: • The proportion of 3T units which will require an upgrade versus those that will require a deep disinfection service; • The cost of providing loaner devices to customers while units are remediated; • The cost of deep disinfection services; • The residual value of loaner devices that LivaNova has acquired; and • the timing of approvals or clearance by regulatory authorities primarily in the US. *Applicable to Group and Company*	We gained a detailed understanding of the 3T matter through discussions with management and reviewing correspondence from the relevant medical and legal authorities, as well as internal compliance and legal documentation. Using this data, we assessed the reasonableness of management's calculation of the provision for future costs related to the remediation plan. We tested its mathematical accuracy and considered the completeness of information included in the valuation. We assessed the reasonableness of the assumptions used in the calculation, in particular in relation to the publicised remediation activity, to ensure that only committed remediation activity was included within the provision. In addition, we performed a sensitivity analysis over the calculations and concluded that reasonably possible changes in the assumptions would not result in a material change in the provision amount.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group and the Company, the accounting processes and controls, and the industry in which the Group operates.

We conducted work full scope audits in 3 key territories: US, Italy and France. In addition, we obtained directed scope opinions from another 13 territories.

The territories where we conducted audit procedures, together with work performed at corporate functions and consolidated Group level, accounted for approximately 92% of the Group's revenue and 91% of the Group's profit before tax.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	***Company financial statements***
Overall materiality	$7.5 million (2016: $7.2 million).	$3 million (2016: $2.4 million).
How we determined it	Approximately 5% of profit before tax adjusted for one-off and exceptional items.	Allocation of Group materiality based on contribution to the Group.
Rationale for benchmark applied	Based on the benchmarks used in the annual report, adjusted profit before tax is the primary measure used by the shareholders in assessing the performance of the Group. Therefore the following have been excluded from profit before tax: • Impairment of CRM upon classification as held for sale; • Expenses arising from the 3T Heater/Cooler Remediation, made up of exceptional items of $7.2m and operating expenses of $7.8m; • Restructuring and integration costs; • Acquisition costs in respect of Caisson and the gain recognised on the minority investment prior to full acquisition; • Losses from equity investments in associates; and • Impairment of cost method investments.	The allocation of Group materiality is based on the contribution of the Company to both the income statement and balance sheet of the LivaNova PLC Group.

For each component in the scope of our Group audit, we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was between $1 million and $7.2 million based on the contribution of the component to the Group. Certain components were audited to a local statutory audit materiality that was also less than our overall Group materiality.

We agreed with the Audit and Compliance Committee that we would report to them misstatements identified during our audit above $800,000 (Group audit) (2016: $400,000) and $800,000 (Company audit) (2016: $400,000) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISAs (UK) require us to report to you when:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or

- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group's and Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's and Company's ability to continue as a going concern.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic Report and Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, the Companies Act 2006 and ISAs (UK) require us also to report certain opinions and matters as described below.

Strategic Report and Directors' Report
In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended 31 December 2017 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.
In light of the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' Report.
Directors' Remuneration
In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Directors' Responsibility Statement set out on pages 51-52, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing as applicable matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of directors' remuneration specified by law are not made; or
- the Company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Jonathan Lambert (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP

Chartered Accountants and Statutory Auditors

London

26 April 2018

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

	Note	Year Ended 31 December 2017	Year Ended 31 December 2016
Revenue	26	$ 1,012,277	$ 964,858
Cost of sales	28	360,045	376,503
Exceptional items – product remediation	19	7,254	37,534
Gross profit		644,978	550,821
Operating expenses:			
Selling, general and administrative	28	409,749	384,751
Research and development	28	114,983	89,014
Operating profit before exceptional items		120,246	77,056
Exceptional items	30	32,584	57,754
Operating income from continuing operations		87,662	19,302
Finance income		1,318	1,698
Finance expense		(7,797)	(10,616)
Gain on acquisition of Caisson Interventional, LLC	6	39,428	—
Impairment of cost-method investments		(8,565)	—
Foreign exchange and other gains		1,084	3,140
Share of loss from equity method investments	11	(16,719)	(18,679)
Income (loss) from continuing operations before tax		96,411	(5,155)
Income tax benefit (expense)	23	9,985	(78,126)
Income (loss) from continuing operations		106,396	(83,281)
Discontinued operations:			
Income (loss) from discontinued operations, net of tax	7	4,538	(111,325)
Impairment of discontinued operations, net of tax	7	(36,868)	—
Loss from discontinued operations	7	(32,330)	(111,325)
Income (loss) attributable to owners of the parent		$ 74,066	$ (194,606)
Basic income (loss) per share:			
Continuing operations	25	$ 2.21	$ (1.70)
Discontinued operations	25	(0.67)	(2.28)
		$ 1.54	$ (3.98)
Diluted income (loss) per share			
Continuing operations	25	$ 2.19	$ (1.70)
Discontinued operations	25	(0.66)	(2.27)
		$ 1.53	$ (3.97)
Shares used in computing basic loss per share	25	48,157	48,860
Shares used in computing diluted loss per share	25	48,501	49,014

See accompanying notes to the consolidated financial statements

LIVANOVA PLC AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(In thousands)

	Note	Year Ended 31 December 2017	Year Ended 31 December 2016
Income (loss) attributable to owners of the parent		$ 74,066	$ (194,606)
Items of other comprehensive income (loss) that will subsequently be reclassified to profit or loss:			
Cash flow hedges for interest rate fluctuations	15	(939)	543
Tax impact		402	(296)
Cash flow hedges for exchange rate fluctuations	15	(5,474)	3,387
Tax impact		1,473	(903)
Foreign currency translation differences		112,623	(6,964)
Unrealized gain on investment		7,272	—
Tax impact		(1,782)	—
Total items of other comprehensive income (loss) that will subsequently be reclassified to profit or loss		113,575	(4,233)
Items of other comprehensive income (loss) that will not subsequently be reclassified to profit or loss:			
Remeasurements of net asset for defined benefits		(327)	(1,629)
Tax impact		64	476
Total items of other comprehensive loss that will not subsequently be reclassified to profit or loss		(263)	(1,153)
Total other comprehensive income (loss), net of taxes		113,312	(5,386)
Total comprehensive income (loss) for the period, net of taxes attributable to owners of the parent		$ 187,378	$ (199,992)

See accompanying notes to the consolidated financial statements

LIVANOVA PLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
(In thousands)

	Note	Year Ended 31 December 2017	Year Ended 31 December 2016
ASSETS			
Non-current assets			
Property, plant and equipment	9	$ 177,989	$ 206,529
Intangible assets	10	549,767	572,548
Goodwill	10	787,929	693,175
Equity investments in associates and joint ventures measured at equity	11	1,799	27,315
Financial assets	12	44,184	38,345
Deferred tax assets	23	78,466	86,053
Other assets		3,638	1,579
Total non-current assets		1,643,772	1,625,544
Current assets			
Inventories	13	144,470	183,489
Trade receivables	14	282,145	275,730
Other receivables	14	24,519	21,163
Financial derivative assets	15	519	8,269
Other financial assets	12	1,395	7,094
Tax assets	23	32,509	47,882
Cash and cash equivalents		93,615	39,789
Total current assets		579,172	583,416
Assets held for sale	8	13,628	4,477
Assets of discontinued operations	7	243,208	—
Total assets		$ 2,479,780	$ 2,213,437
LIABILITIES AND EQUITY			
Equity			
Share capital		$ 74,750	$ 74,578
Group reconstruction reserve		1,729,764	1,729,764
Share premium		14,485	9,684
Treasury shares		(133)	(4,500)
Accumulated other comprehensive income (loss)	16	43,514	(69,798)
Retained deficit		(45,273)	(161,101)
Total equity		$ 1,817,107	$ 1,578,627
Non-current liabilities			
Financial derivative liabilities	15	$ 751	$ 1,392
Financial liabilities	17	61,958	75,215
Other liabilities	18	10,318	4,369
Provisions	19	63,406	31,007
Provision for employee severance indemnities and other employee benefit provisions	22	25,277	33,609
Public grants		—	3,804
Deferred income taxes liability	23	96,732	168,603
Total non-current liabilities		258,442	317,999

LIVANOVA PLC AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEET - (Continued)

(In thousands)

	Note	31 December 2017	31 December 2016
Current liabilities			
Trade payables		84,716	89,514
Other payables	20	116,361	105,664
Financial derivative liabilities	15	1,294	942
Other financial liabilities	17	84,034	47,650
Provisions	19	28,710	50,701
Tax payable		12,826	22,340
Total current liabilities		327,941	316,811
Liabilities of discontinued operations	7	76,290	—
Total liabilities and equity		$ 2,479,780	$ 2,213,437

See accompanying notes to the consolidated financial statements

The financial statements on pages 74 to 149 were approved by the Board of Directors and were signed on its behalf on 26 April 2018 by:

DAMIEN MCDONALD

CHIEF EXECUTIVE OFFICER & DIRECTOR

LIVANOVA PLC AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(In thousands)

	Note	Ordinary		Group Reconstruction Reserve	Additional Paid-in Capital Share Premium	Treasury Shares	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Deficit)	Total Equity
		Number of Shares	Share Capital						
Balance at 31 December 2015		48,868	$ 75,444	$ 1,729,764	$ 1,673	$ —	$ (64,412)	$ 58,178	$ 1,800,647
Share-based compensation plans	21	282	391	—	8,011	—	—	24,057	32,459
Purchase of ordinary shares	16	(993)	(1,257)	—	—	(4,500)	—	(48,730)	(54,487)
Total transactions with owners recognised directly in shareholders' equity		48,157	74,578	1,729,764	9,684	(4,500)	(64,412)	33,505	1,778,619
Net loss		—	—	—	—	—	—	(194,606)	(194,606)
Other comprehensive loss	16	—	—	—	—	—	(5,386)	—	(5,386)
Total comprehensive loss for the period		—	—	—	—	—	(5,386)	(194,606)	(199,992)
Balance at 31 December 2016		48,157	74,578	1,729,764	9,684	(4,500)	(69,798)	(161,101)	1,578,627
Share-based compensation plans	21	133	172	—	4,801	4,367	—	41,762	51,102
Total transactions with owners recognised directly in shareholders' equity		48,290	74,750	1,729,764	14,485	(133)	(69,798)	(119,339)	1,629,729
Net income		—	—	—	—	—	—	74,066	74,066
Other comprehensive income	16	—	—	—	—	—	113,312	—	113,312
Total comprehensive income for the period		—	—	—	—	—	113,312	74,066	187,378
Balance at 31 December 2017		48,290	$ 74,750	$ 1,729,764	$ 14,485	$ (133)	$ 43,514	$ (45,273)	$ 1,817,107

See accompanying notes to the consolidated financial statements

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

	Note	Year Ended 31 December 2017	Year Ended 31 December 2016
Cash Flows From Operating Activities:			
Income (loss) for the period		$ 74,066	$ (194,606)
Non-cash items included in loss:			
Depreciation and amortization	9, 10	78,508	88,771
Share-based compensation	21	28,861	27,064
Gain on acquisition of Caisson Interventional, LLC	6	(39,428)	—
Impairment of discontinued operations	7	44,904	—
Impairment of cost-method investments		8,565	—
Impairment of goodwill and other assets	10	—	72,314
Amortization on income taxes payable on intercompany transfers		31,784	25,952
Impairment of property, plant and equipment		5,979	5,971
Loss from equity method investments		21,606	22,612
Net finance expense		6,479	8,918
Income tax (benefit) expense		(24,629)	72,931
Other non-cash items		2,858	9,777
Changes in operating assets and liabilities:			
Accounts receivable, net		(48,934)	(16,448)
Inventories		7,187	26,703
Other current and non-current assets		(6,180)	(32,686)
Restructuring reserve		(14,557)	12,405
Current and non-current liabilities		(39,246)	15,653
Cash provided by operations		137,823	145,331
Interest paid		(7,510)	(7,371)
Income taxes paid		(38,974)	(47,808)
Net cash provided by operating activities		91,339	90,152
Cash Flow From Investing Activities:			
Purchase of property, plant, equipment and other	9	(34,107)	(38,362)
Acquisition of Caisson Interventional, LLC, net of cash acquired	6	(14,194)	—
Proceeds from sale of cost-method investments		3,192	—
Proceeds from asset sales		5,935	1,145
Purchases of cost and equity method investments		(6,255)	(8,026)
Loans to equity method investees		(7,426)	(6,270)
Purchase of short-term investments		—	(7,054)
Maturities of short-term investments		—	14,051
Net cash (used in) provided by investing activities		(52,855)	(44,516)
Cash Flows From Financing Activities:			
Change in short-term borrowing, net		12,396	(33,708)
Proceeds from short-term borrowing (maturities greater than 90 days)		20,000	—
Proceeds from long-term debt obligations		2,048	7,231
Repayment of long-term debt obligations		(22,755)	(21,109)
Repayment of trade receivable advances		—	(23,779)
Purchase of treasury shares		—	(54,487)
Proceeds from exercise of options for stock		4,973	8,332
Cash settlement of compensation-based share units		—	(2,724)
Realised excess tax benefits - share-based compensation		—	2,060
Other financial assets and liabilities		(5,368)	144
Net cash provided by (used) in financing activities		11,294	(118,040)
Effect of exchange rate changes on cash and cash equivalents		4,048	(420)
Net increase (decrease) in cash and cash equivalents		53,826	(72,824)
Cash and cash equivalents at beginning of period		39,789	112,613
Cash and cash equivalents at end of period		$ 93,615	$ 39,789

See accompanying notes to the consolidated financial statements

Note 1. Nature of Operations

Company information. LivaNova PLC is a public limited company incorporated in the United Kingdom under the Companies Act 2006 (Registration number 09451374). The Company is domiciled in the United Kingdom and its registered address is 20 Eastbourne Terrace, London, W2 6LG, United Kingdom.

Background. LivaNova PLC was organized under the laws of England and Wales on 20 February 2015 for the purpose of facilitating the business combination of Cyberonics, Inc., a Delaware corporation and Sorin S.p.A., a joint stock company organized under the laws of Italy. As a result of the business combination, LivaNova, headquartered in London, became the holding company of the combined businesses of Cyberonics and Sorin. This business combination became effective on 19 October 2015, at which time LivaNova's Ordinary Shares were listed for trading on the Nasdaq and on the London Stock Exchange as a standard listing under the trading symbol "LIVN." Upon the consummation of the Mergers, the historical financial statements of Cyberonics became the Company's historical financial statements. On 23 February 2017, we announced our voluntary cancellation of our standard listing of our shares with the London Stock Exchange due to the low trading volume of our shares and trading ceased at the close of business on 4 April 2017. We continue to serve our shareholders through our listing on the Nasdaq.

The principal legislation under which LivaNova operates is the Companies Act 2006, and regulations made thereunder. The LivaNova Shares were admitted to listing on the Official List pursuant to Chapter 14 of the Listing Rules, which sets out the requirements for standard listings. LivaNova complies with Listing Principles 1 and 2 as set out in Chapter 7 of the Listing Rules, as required by the Financial Conduct Authority.

Description of the business. LivaNova is 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.

On 20 November 2017, we entered into a LOI to sell our CRM to MicroPort Scientific Corporation for $190.0 million in cash, and, on 8 March 2018, we entered into a definitive Purchase Agreement. Completion of the transaction is subject to receipt of relevant regulatory approvals, including fulfilling the requirements of the Hong Kong Stock Exchange's Major Transaction requirements, and other customary closing conditions. We expect the transaction to close in the second quarter of 2018. We concluded that the sale of CRM represents a strategic shift and therefore qualifies as a discontinued operation under IFRS. Accordingly, the operating results of the CRM business franchise are reflected as discontinued operations for all periods presented in this Annual Report and the related assets and liabilities are presented as held for sale as of 31 December 2017.

Business franchises. LivaNova is comprised of two principal business franchises, which are also our reportable segments: Cardiac Surgery and Neuromodulation, corresponding to our primary therapeutic areas. Other corporate activities include corporate business development and New Ventures, focused on new growth platforms and identification of other opportunities for expansion.

Note 2. Basis of Preparation, Use of Accounting Estimates and Significant Accounting Policies

Basis of Preparation. The consolidated financial statements of LivaNova have been prepared on a going concern basis, in accordance with the Companies Act 2006 as applicable to companies using IFRS adopted by the European Union and interpretations issued by the IFRS Interpretations Committee.

The financial statements for the years ended 31 December 2017 and 31 December 2016 were prepared in accordance with IFRS.

The consolidated financial statements have been prepared on a historical cost basis, except for derivative financial instruments and share awards that have been measured at fair value. The consolidated financial statements are presented in USDs and all values are rounded to the nearest thousands, except where otherwise indicated.

Fiscal Year-End. LivaNova's fiscal year ends 31 December.

Consolidation. The accompanying consolidated financial statements include LivaNova, our wholly owned subsidiaries and the LivaNova PLC Employee Benefit Trust. All significant intercompany accounts and transactions have been eliminated.

Sale of our Cardiac Rhythm Management business franchise. On 20 November 2017, we entered into a LOI to sell our CRM to MicroPort Scientific Corporation for $190.0 million in cash, and, on 8 March 2018, we entered into a definitive Purchase Agreement. Completion of the transaction is subject to receipt of relevant regulatory approvals, including fulfilling the requirements of the Hong Kong Stock Exchange's Major Transaction requirements, and other customary closing conditions. We expect the transaction to close in the second quarter of 2018. As a result of the commitment to undertake the proposed transaction, we recognised an impairment of $36.9 million, net of an $8.0 million tax benefit, related to the intangible and tangible assets of the CRM business franchise. The impairment is included in impairment of discontinued operations, net of tax within the consolidated statements of income (loss) for the year ended 31 December 2017. We concluded that the sale of the CRM business franchise represents a strategic shift in our business that will have a major effect on future operations and financial results and therefore qualifies as a discontinued operation under IFRS. The results of operations of the CRM business franchise are reflected as discontinued operations for the year ended 31 December 2017 and 31 December 2016. The assets and liabilities of the CRM business franchise are classified as held for sale and presented as either assets or liabilities of the discontinued operation on the consolidated balance sheet as at 31 December 2017. All balance sheet data prior to 31 December 2017 reflect the assets and liabilities of the CRM business franchise as previously reported.

Investments in Associates. Associates are all entities over which the group has significant influence but not control or joint control. This is generally where the Company holds between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting, after initially being recognised at cost.

Joint Arrangements. Under IFRS 11 Joint Arrangements investments are classified as either joint operations or joint ventures. Interests in joint ventures are accounted for using the equity method of accounting, after initially being recognised at cost in the consolidated balance sheet. LivaNova has joint ventures.

Equity method. Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the Company's share of the post-acquisition profits or losses of the investee in profit or loss, and the Company's share of movements in other comprehensive income (loss) of the investee in other comprehensive income (loss). Dividends received or receivable from associates are recognised as a reduction in the carrying amount of the investment.

Unrealised gains on transactions between the Company and its associates and joint ventures are eliminated to the extent of the Company's interest in these entities. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Business Combinations. We allocate the amounts we pay for an acquisition to the assets we acquire and liabilities we assume based on their fair values at the date of acquisition, including property, plant and equipment, inventories, accounts receivable, long-term debt, and identifiable intangible assets which either arise from a contractual or legal right or are separable from goodwill. We base the fair value of identifiable intangible assets acquired in a business combination, including in-process-research and development, on detailed valuations that use information and assumptions provided by management, which consider management's best estimates of inputs and assumptions that a market participant would use. We allocate any excess purchase price over the fair value of the net tangible and identifiable intangible assets acquired to goodwill. Transaction costs associated with these acquisitions are expensed as incurred and are reported as operating expenses.

Goodwill is initially measured at cost (being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests) and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Company re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Company's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Foreign currencies. The financial statements of all LivaNova entities are measured using the currency of the primary economic environment in which the entity operates (functional currency). The USD is the functional currency of the Company and presentation

currency of LivaNova financial statements. Foreign currency transactions are translated into functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the consolidated statements of income (loss), except when deferred in other comprehensive income (loss) as qualifying cash flow hedges.

Foreign currency differences arising from translation are recognised in the consolidated statements of income (loss).

The GBP exchange rate to the USD used in preparing the Company financial statements was as follows:

	Weighted Average Rate GBP	Closing Rate GBP
Year ended 31 December 2017	0.776928	0.739730
Year ended 31 December 2016	0.741130	0.812240

Foreign operations. The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisitions are translated to USDs at exchange rates at the reporting date. The income and expenses of foreign operations are translated to USDs at exchange rates at the dates of transactions. Foreign currency differences arising on translation of foreign operations into USDs are recognised in other comprehensive income (loss).

Current versus non-current classification. The Company presents assets and liabilities in the statement of financial position based on current/non-current classification. An asset is current when it is:

- Expected to be realised or intended to be sold or consumed in the normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realised within twelve months after the reporting period, or
- A Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in the normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

The Company classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial assets and financial liabilities are offset with the net amount reported in the consolidated balance sheet only if there is a current enforceable legal right to offset the recognised amounts and intent to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

(a) *Financial assets*

Initial recognition *and measurement.* Financial assets are classified, at initial recognition, as financial assets at fair value through profit or loss, loans and receivables, held-to-maturity investments, available-for-sale financial assets, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. The Company determines the classification of its financial assets at initial recognition. All financial assets are recognised initially at fair value plus, in the case of assets not at fair value through profit or loss,

transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognised on the trade date, i.e., the date on which the Company commits to purchase or sell the asset.

Impairment of financial assets. The Company assesses, at each reporting date, whether there is any objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that has occurred since the initial recognition of the asset (an incurred 'loss event'), has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial re-organisation. Evidence of impairment may also include cases where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

The subsequent measurement and impairment of financial assets depends on their classification as described below:

Financial assets at fair value through profit or loss. Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held-for trading if they are acquired for the purpose of selling or re-purchasing in the near term. This category includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by IAS 39. We use freestanding derivative forward contracts to offset exposure to the variability of the value associated with assets and liabilities denominated in a foreign currency. These derivatives are not designated as hedges, and therefore changes in the value of these forward contracts are recognised in income statement, thereby offsetting the current net income (loss) effect of the related change in value of foreign currency denominated assets and liabilities. The Company has not designated any financial assets as at fair value through profit or loss.

Loans and receivables. Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate method, less impairment. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit or loss. The receivable balance consists of trade receivables from direct customers and distributors and loans issued. We maintain an allowance for doubtful accounts for potential credit losses based on our estimates of the ability of customers to make required payments, historical credit experience, existing economic conditions and expected future trends. We write off uncollectable accounts against the allowance when all reasonable collection efforts have been exhausted. Loans, together with the associated allowance are written off when there is no realistic prospect of future recovery and all collateral has been realised or has been transferred to the Company. The losses arising from impairment are recognised in the consolidated statements of income (loss) in cost of sales or other operating expenses for receivables. Refer to "Note 14. Trade Receivables and Allowance for Bad Debt" for further information.

Available-for-sale financial investments. The Company has certain investments in equity and other securities of unquoted companies that are in varied stages of development. The investments in these companies are classified as available-for-sale and are valued based on non-market observable information. The valuation requires management to make certain assumptions about the model inputs, including forecast cash flows, the discount rate, credit risk and volatility. The probabilities of the various estimates within the range can be reasonably assessed and are used in management's estimate of fair value for these unquoted equity investments. After initial measurement, available-for-sale financial investments are subsequently measured at fair value with unrealised gains or losses recognised as other comprehensive income (loss) in the available-for-sale reserve until the investment is de-recognised, at which time, the cumulative gain or loss is recognised in income (loss) from continuing operations, or the investment is determined to be impaired, at which time, the cumulative loss is reclassified to the income (loss) from continuing operations and removed from the available-for-sale reserve. If it is not possible to determine the fair value in the absence of a market value or company plans from which the value in use can be determined using valuation techniques, they are carried at cost and written down for any impairment. These investments are included in non-current "Financial assets" on the consolidated balance sheet.

For AFS financial investments, the Company assesses at each reporting date whether there is objective evidence that an investment or a group of investments is impaired. In the case of equity investments classified as AFS, objective evidence would include a significant or prolonged decline in the fair value of the investment below its cost. 'Significant' is evaluated against the original cost of the investment and 'prolonged' against the period in which the fair value has been below its original cost. Where there is evidence

of impairment, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that investment previously recognised in the consolidated statements of income (loss), is removed from other comprehensive income (loss) and recognised in the consolidated statements of income (loss). Impairment losses on equity investments are not reversed through profit or loss; increases in their fair value after impairments are recognised in other comprehensive income. The determination of what is 'significant' or 'prolonged' requires judgement. In making this judgement, the Company evaluates, among other factors, the duration or extent to which the fair value of an investment is less than its cost.

Derecognition. A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is derecognised when:

- The rights to receive cash flows from the asset have expired, or
- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through arrangement, and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and, to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset nor transferred control of it, the asset is recognised to the extent of its continuing involvement in it. In that case, the Company also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Company could be required to repay.

The Company has entered into sales of trade receivables through factoring transactions. The trade receivables that are sold without recourse are derecognised only if such sale transfers substantially all risks and rewards associated with owning the receivables, as required by IAS 39. In other cases of non-recourse sales or with-recourse sales, the receivables continue to be recognised within current assets in the consolidated balance sheet, and the advances received for such receivables are recorded as a financial liability. Refer to "Note 14. Trade Receivables and Allowance for Bad Debt" for a detailed description.

(b) *Financial liabilities*

Initial recognition and measurement. Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings (bank debt), payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial liabilities are recognised initially at fair value and, in the case of loans, borrowings and payables, net of directly attributable transaction costs. The Company's financial liabilities include trade and other payables, loans and bank debt including bank overdrafts, and derivative financial instruments.

The measurement of financial liabilities depends on their classification, as follows:

Financial liabilities at fair value through profit or loss. Financial liabilities at fair value through profit or loss include financial liabilities held-for-trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held-for-trading if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by IAS 39. Gains or losses on liabilities held-for-trading are recognised in the consolidated statements of income (loss). Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IAS 39 are satisfied. The Company has not designated any financial liabilities as at fair value through profit or loss.

Loans and borrowings (bank debt). After initial recognition, interest bearing loans and borrowings are subsequently measured at amortised cost using the effective interest rate method. Gains and losses are recognised in the consolidated statements of income (loss) when the liabilities are de-recognised, as well as through the EIR method amortisation process. Amortised cost is calculated

by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in the consolidated statements of income (loss).

Financial guarantee contracts. Financial guarantee contracts issued by the Company are those contracts that require a payment to be made to reimburse the holder for a loss it incurs, because the specified debtor fails to make a payment when due, in accordance with the terms of a debt instrument. Financial guarantee contracts are recognised initially as a liability at fair value, and then adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequently, the liability is measured at the higher of the best estimate of the expenditure required to settle the present obligation at the reporting date and the amount recognised less cumulative amortisation.

Derecognition. A financial liability is de-recognised when the obligation under the liability is discharged, cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a de-recognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the consolidated statements of income (loss).

Derivative financial instruments and hedge accounting. We use currency exchange rate derivative contracts and interest rate derivative instruments to manage the impact of currency exchange and interest rate changes on the consolidated statements of income (loss) and the consolidated statements of cash flows. Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. 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 the consolidated statements of income (loss). Cash flows from derivative contracts are reported as operating activities in the consolidated statements of cash flows.

When a hedging instrument expires, is sold or is terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the consolidated statements of income (loss). When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately reclassified to profit or loss.

In order to minimize income statement and cash flow volatility resulting from currency exchange rate changes, we enter into derivative instruments, principally forward currency exchange rate contracts. These contracts are designed to hedge anticipated foreign currency transactions and changes in the value of specific assets and liabilities and of some revenue. At inception of the forward contract, the derivative is designated as either a freestanding derivative or a cash flow hedge. For derivative instruments that are designated and qualify as a cash flow hedge, the effective portion of the gain or loss on the derivative instrument is reported as a component of accumulated other comprehensive income (loss) and reclassified to the consolidated statements of income (loss) to offset exchange differences originated by the hedged item or to adjust the value of net income (loss) from continuing operations. We do not enter into currency exchange rate derivative contracts for speculative purposes.

We use interest rate derivative instruments designated as cash flow hedges to manage the exposure to interest rate movements and to reduce the risk of increased borrowing costs, by converting floating-rate debt into fixed-rate debt. Under these agreements, we agree to exchange, at specified intervals, the difference between fixed and floating interest amounts, calculated by reference to agreed-upon notional principal amounts. The interest rate swaps are structured to mirror the payment terms of the underlying loan. The fair value of the interest rate swaps is reported in the consolidated balance sheets financial assets or liabilities (current or non-current) depending upon the gain or loss position of the contract and the maturity of the future cash flows of the fair value of each contract. The effective portion of the gain or loss on these derivatives is reported as a component of accumulated other comprehensive income (loss). The non-effective portion is reported in interest expense in the consolidated statements of income (loss).

Cash and Cash Equivalents. We consider all highly liquid investments with an original maturity of three months or less, consisting of demand deposit accounts and money market mutual funds, to be cash equivalents and are carried in the consolidated balance sheets at cost, which approximate their fair value.

Borrowing costs. General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use or sale. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale. Investment

income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation. Other borrowing costs are expensed in the period in which they are incurred.

Non-monetary assets

Property, Plant and Equipment. PP&E is carried at cost, less accumulated depreciation and any accumulated impairment losses. Maintenance and repairs, and minor replacements are charged to expense as incurred, while significant renewals and improvements are capitalized. We compute depreciation using the straight-line method over estimated useful lives. Where an item of PP&E comprises several parts with different useful lives, each part is recognised as a separate item and depreciated over its useful life. Useful life and residual value of PP&E are reviewed at each period-end. As necessary, the occurrence of changes to the useful life or residual value is recognised prospectively as a change in accounting estimates.

Leasehold improvements are depreciated over the shorter of the useful life of an asset or the lease term. Capital improvements to the building are added as building components and depreciated over the useful life of the improvement or the building, whichever is less.

We classify long-lived assets as held for sale in the period in which we commit to a plan to sell the asset, the asset is available for immediate sale, the asset is being actively marketed for sale at a price that is reasonable in relation to its current fair value and the sale of the asset is probable. A long-lived asset classified as held for sale is measured at the lower of its carrying amount or fair value less cost to sell and depreciation is discontinued. We recognize a loss for any excess of carrying value over the fair value less cost to sell.

The estimated useful lives for all classes of depreciable PP&E except for land and capital investment in process as of 31 December 2017 are as follow:

	Lives in Years
Building and building improvements	3 to 50
Equipment, furniture, fixtures	3 to 20
Other	3 to 10

Where there are any internal or external indications that the value of an item of PP&E may be impaired, the recoverable amount of the group of cash generating units to which it belongs is calculated. If the recoverable amount is less than the carrying amount of the group of CGUs, a provision for impairment is recorded.

Intangible Assets. Intangible assets shown on the consolidated balance sheets consist of finite-lived and indefinite-lived assets. Developed technology rights consist primarily of existing technology and technical capabilities acquired from Sorin in the Mergers that were recorded at their respective fair values as of the acquisition date which includes patents, related know-how and licensed patent rights that represent assets expected to generate future economic benefits. Trademarks and trade names include the Sorin trade name acquired as part of the Mergers. In-process R&D was recognized as part of the acquisition of Caisson. Customer relationships consist of relationships with hospitals and cardiac surgeons in the countries where we operate. Other intangible assets consist of favourable leases acquired from Sorin in the Mergers. We amortize our finite-lived intangible assets over their useful lives using the straight-line method. Customer relationships, developed technology, trademarks and trade names, software and other intangible assets are finite-lived intangible assets. In-process R&D is an indefinite-lived intangible asset.

We evaluate our intangible assets each reporting period to determine whether events and circumstances indicate either a different useful life or impairment. If we change our estimate of the useful life of an asset, we amortize the carrying amount over the revised remaining useful life.

Impairment of Intangible Assets and Goodwill. The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's CGU's fair value less costs of disposal and its value in use. It is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Usually, the Company applies the fair value less costs of disposal method for its impairment assessment. In most cases no directly observable market inputs are available to measure the fair value less costs of disposal. Fair value less costs of disposal reflects estimates of assumptions that market participants would be expected to use when pricing the asset or CGU. Goodwill impairment evaluations are highly subjective. In most instances, they involve expectations of future cash flows that reflect our judgements and assumptions regarding future industry conditions and operations. The estimates, judgements and assumptions used in the application of our goodwill impairment policies reflect both historical experience and an assessment of current operational, industry, market, economic and political environments. Quantitative factors used to determine the fair value of the CGU reflect our best estimates, and we believe they are reasonable. Future declines in the CGU's operating performance or our anticipated business outlook may reduce the estimated fair value of our CGU and result in additional impairment. Factors that could have a negative impact on the fair value of the reporting units include, but are not limited to:

- Decreases in revenue as a result of the inability of our sales force to effectively market and promote our products;
- Increased competition, patent expirations or new technologies or treatments;
- Declines in anticipated growth rates;

- The outcome of litigation, legal proceedings, investigations or other claims resulting in significant cash outflows; and
- Increases in the market-participant risk-adjusted WACC.

Generally, for intangible assets with a definite useful life, the Company uses cash flow projections for the whole useful life of these assets with a terminal value based on cash flow projections usually in line with or lower than inflation rates for later periods.

Discount rates used are based on the Company's estimated weighted average cost of capital adjusted for specific country and currency risks associated with cash flow projections as an approximation of the weighted average cost of capital of a comparable market participant. Due to the above factors, actual cash flows and values could vary significantly from forecasted future cash flows and related values derived using discounting techniques.

Goodwill is tested for impairment annually as at 31 December and when circumstances indicate that the carrying value may be impaired. Impairment is determined for goodwill by assessing the recoverable amount of each CGU (or group of CGUs) to which the goodwill relates. Where the recoverable amount of the cash generating unit is less than their carrying amount, an impairment loss is recognised. Impairment losses relating to goodwill cannot be reversed in future periods.

Research and Development. Research costs are recognised as an expense for the period in which they are incurred. R&D includes costs of basic research activities as well as engineering and technical effort required to develop a new product or make significant improvement to an existing product or manufacturing process. R&D costs also include regulatory and clinical study expenses, including post-market clinical studies.

Inventories. We state our inventories at the lower of cost, using the first-in first-out, and net realizable value. Our calculation of cost includes the acquisition cost of raw materials and components, direct labour and overhead. We reduce the carrying value of inventories for those items that are potentially excess, obsolete or slow moving based on changes in customer demand, technology developments or other economic factors.

Revenue Recognition

Product Revenue. We sell our products through a direct sales force and independent distributors. We recognise revenue when significant risks and benefits associated with the products' ownership are transferred, and the amount of revenues can be reliably determined. We estimate expected sales returns based on historical data and record a reduction of sales with a return reserve. We record state and local sales taxes net, that is, we exclude sales tax from revenue.

Service Revenue. Services largely consist of technical assistance services provided to hospitals for the installation, maintenance and support in the operation of heart-lung machines, and autotransfusion systems. Service related revenue is recognised on the basis of progress of the services, when services are rendered, when collectability is probable and when the revenue amount can be reliably measured.

U.S. MDET . Section 4191 of the Internal Revenue Code enacted by the Health Care and Education Reconciliation Act of 2010, in conjunction with the Patient Protection and Affordable Care Act, imposed, among other things, an annual excise tax of 2.3% on any entity that manufactures or imports medical devices offered for sale in the United States. Due to subsequent legislative amendments the excise tax has been suspended for the period 1 January 2016 to 31 December 2019, and, absent further legislative action, will be reinstated starting 1 January 2020.

Italian Medical Device Payback. The Italian Parliament introduced new rules for entities that supply goods and services to the Italian National Healthcare System. The new healthcare law is expected to impact the business and financial reporting of companies operating in the medical technology sector that sell medical devices in Italy. A key provision of the law is a 'payback' measure, requiring companies selling medical devices in Italy to make payments to the Italian state if medical device expenditures exceed regional maximum ceilings. Companies are required to make payments equal to a percentage of expenditures exceeding maximum regional caps. There is considerable uncertainty about how the law will operate and what the exact time-line is for finalization. Our current assessment of the Italian Medical Device Payback involves significant judgement regarding the expected scope and actual implementation terms of the measure as the latter have not been clarified to date by Italian authorities. We account for the estimated cost of the Italian Medical Device Payback as a deduction from revenue.

Defined Benefit Pension Plans and Other Post-Employment Benefits. The Company sponsors various retirement benefit plans, including defined benefit pension plans (pension benefits), defined contribution savings plans and termination indemnity plans, covering substantially all U.S. employees and employees outside the United States. The cost of providing benefits under the defined benefit plans is determined separately for each plan using the projected unit credit method.

Re-measurements, comprising of actuarial gains and losses, the effect of the asset ceiling (excluding amounts included in net interest on the net defined benefit liability) and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the consolidated balance sheet with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Re-measurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognised in profit or loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date on which the Company recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Company recognises the following changes in the net defined benefit obligation under cost of sales and selling, general and administrative expenses in the consolidated statements of income (loss) (by function):

- Service costs comprising current service costs, past-service costs, gains and losses on curtailment and non-routine settlements
- Net interest expense or income

Provision for severance indemnity is mandatory for Italian companies and is considered:

- a defined benefit plan with respect to amounts vested up to 31 December 2006 and amounts vesting from 1 January 2007 for employees who have chosen to maintain the TFR at the company, for companies with 50 or fewer employees;
- a defined contribution plan with respect to amounts vesting as from 1 January 2007 for employees who have opted for supplementary pensions or who have chosen to maintain the TFR at the company, for companies with more than 50 employees.

As a defined benefit plan, the TFR is measured using the unit credit projection method based on actuarial assumptions (demographic assumptions: mortality, turnover, disability of the population included in the above plan; financial assumptions: discount rate, benefit growth rate, capitalization rate). The increase in the present value of the TFR is included in personnel expense, with the exception of the revaluation of the net liability, which is recorded among items of other comprehensive income. The cost of TFR accrued through 31 December 2006 no longer includes the component related to future salary increases. Payments of TFR, as a defined contribution plan, are also included in personnel expense, and until they are settled financially, they have a balancing entry in the statement of financial position in the form of current payables.

Share-Based Compensation

We grant share-based incentive awards to directors, officers, key employees and consultants during each fiscal year. We measure the cost of employee services received in exchange for an award of equity instruments based on the grant date fair market value of the award. The cost of equity-settled transactions is recognised in employee benefits expense, together with a corresponding increase in Retained earnings over the period in which the service and the performance conditions are fulfilled (the vesting period). The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Company's best estimate of the number of equity instruments that will ultimately vest. We issue new shares upon share option exercise, SAR exercise, the award of restricted share and at our election, on vesting of a restricted share unit. The social security contributions on employee share-based payment awards are accrued over the service period.

The following share-based incentive awards are offered by the Company:

- *Share Appreciation Rights.* A SAR confers upon an employee the contractual right to receive an amount of cash, share, or a combination of both that equals the appreciation in the Company's common share from an award's grant date to the exercise date. SARs may be exercised at the employee's discretion during the exercise period and do not give the employee an ownership right in the underlying share. The SARs may be settled in LivaNova shares and/or cash, as determined by LivaNova and as set forth in the individual award agreements. SARs do not involve payment of an exercise price. We use the Black-Scholes option pricing methodology to calculate the grant date fair market value of SARs. We determine the expected volatility on historical volatility.

- *Restricted Share and Restricted Share Units.* We grant restricted share and restricted share units at no purchase cost to the grantee, which typically vest over four years or cliff-vest in one or three years. Unvested restricted share entitles the grantees to dividends, if any, and voting rights for their respective shares. Sale or transfer of the share and share units are restricted until they are vested. We issue new shares for our restricted share and restricted share unit awards. We have the right to elect to pay the cash value of vested restricted share units in lieu of the issuance of new shares. Under our share-based compensation plans we re-purchase a portion of these shares from our employees to permit our employees to meet their minimum statutory tax withholding requirements on vesting of their restricted share.

- *Service-Based Restricted Share and Restricted Share Units.* The fair market value of service-based restricted share and restricted share units are determined using the market closing price on the grant date, and compensation is expensed rateable over the vesting period. Calculation of compensation for restricted share awards requires estimation of employee turnover and forfeiture rates.

- *Market and Performance-Based Restricted Share and Performance-Based Restricted Share Units.* We may grant restricted share and restricted share units subject to market or performance conditions that vest based on the satisfaction of the conditions of the award. The fair market values of market condition-based awards are determined using the Monte Carlo simulation method. The Monte Carlo simulation method is subject to variability as several factors utilized must be estimated, including the derived service period, which is estimated based on our judgement of likely future performance and our share price volatility. The fair value of performance-based awards is determined using the market closing price on the grant date. Derived service periods and the periods charged with compensation expense for performance-based awards are estimated based on our judgement of likely future performance and may be adjusted in future periods depending on actual performance.

Income Taxes. The tax expense for the period comprises current and deferred tax. Current and deferred tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction, adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the company's subsidiaries and associates operate and generate taxable income. The Company is subject to taxation on earnings in several countries under various tax regulations. Calculation of taxes on a global scale requires the use of

estimates and assumptions developed based on the information available at the balance sheet date. Management establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred taxes are recognised by the liability method for temporary differences between the carrying amount of assets and liabilities in the consolidated balance sheet and their tax base. They are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date. Adjustments to deferred taxes resulting from changes in tax rates are recognised in profit or loss. However, when the deferred tax relates to items recognised in equity, the adjustment is also recognised in equity. A deferred tax asset is recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. At each period-end, the Company reviews the recoverable value of deferred tax assets of tax entities holding significant loss carryforwards. This value is based, by tax entity, on the strategy for recoverability of the tax loss carryforwards. Deferred taxes are charged or credited directly to equity when the tax relates to items that are recognised directly in equity, such as gains and losses on cash flow hedges and actuarial gains and losses on defined benefit plan obligations. Deferred tax assets and liabilities are set off when they are levied on the same taxable entity (legal entity or tax group) by the same taxation authority and the entity has a legally enforceable right of set off. Deferred taxes are recognised for all temporary differences associated with investments in subsidiaries and associates, except to the extent that the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax balances are not discounted.

Leases. We account for leases that transfer substantially all risks and rewards incident to the ownership of property as an acquisition of an asset and the incurrence of an obligation, and we account for all other leases as operating leases. Certain of our leases provide for tenant improvement allowances that have been recorded as deferred rent and amortized, using the straight-line method, over the life of the lease as a reduction to rent expense. In addition, scheduled rent increases and rent holidays are recognised on a straight-line basis over the term of the lease.

Equity. Ordinary Shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Where any group company purchases the Company's equity instruments, for example as the result of a share buy-back or a share-based payment plan, the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to the owners of LivaNova as treasury share until the shares are cancelled or reissued. Where such Ordinary Shares are subsequently reissued, any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the owners of LivaNova.

Provisions and warranties. Provisions for legal claims, service warranties and make good obligations are recognised when the Company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are not recognised for future operating losses. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The discount rate used to determine the present value is a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognised as interest expense.

The Company offers a warranty on various products. The Company estimates the costs that may be incurred under warranties and records a liability in the amount of such costs at the time the product is sold. The amount of the reserve recorded is equal to the net costs to repair or otherwise satisfy the claim. The warranty obligation is included in accrued liabilities on the consolidated balance sheet. Warranty expense is recorded to cost of sales in the consolidated statements of income (loss).

Contingencies. The Company is subject to product liability claims, government investigations and other legal proceedings in the ordinary course of business. Legal fees and other expenses related to litigation are expensed as incurred and included in selling, general and administrative expenses in the consolidated statements of income (loss). Contingent accruals are recorded when the

Company determines that a loss is both probable and reasonably estimable. Due to the fact that legal proceedings and other contingencies are inherently unpredictable, our assessments involve significant judgement regarding future events.

Earnings Per Share. Basic income (loss) per share is calculated by dividing the income (loss) for the year attributable to equity holders of the parent by the weighted average number of shares outstanding during the year. Diluted EPS is calculated by dividing the income (loss) attributable to equity holders of the parent by the weighted average number of shares outstanding during the year plus the weighted average number of shares that would be issued on conversion of all the dilutive potential shares into shares. Refer to ”Note 25. Earnings per Share” for additional information.

Segments. LivaNova is comprised of two principal business franchises, which are also our reportable segments: Cardiac Surgery and Neuromodulation, corresponding to our primary therapeutic areas. Other corporate activities include corporate business development and New Ventures, 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 “Note 26. Geographic and Segment Information” for additional information.

Critical Estimates and Judgements. The preparation of our consolidated financial statements in conformity with IFRS requires management to make estimates and judgements that affect the amounts reported in such financial statements and accompanying notes. These estimates and judgements are based on management’s best knowledge of current events and actions we may undertake in the future. Actual results could differ materially from those estimates. Application of the following accounting policies requires certain judgements and estimates that have the potential for the most significant impact on our consolidated financial statements:

Critical Estimates

- *Impairment of non-financial assets.* An impairment exists when the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is generally based on available data from binding sales transactions, conducted at arm’s length for similar assets, observable market prices less incremental costs for disposing of the asset or based on a discounted cash flow model. The discounted cash flow model is most sensitive to the discount rate used as well as the expected future cash inflows and the growth rate used for extrapolation purposes. Refer to disclosure in "Note 10. Goodwill and Intangible Assets" where reasonably possible changes in key assumptions could affect the carrying value.

- *Retirement and Other Post-Employment Benefit Plans.* We sponsor pension and other post-employment benefit plans in various forms that cover a significant portion of our current and former associates. For post-employment plans with defined benefit obligations, we are required to make significant assumptions and estimates about future events in calculating the expense and the present value of the liability related to these plans. These include assumptions about the interest rates we apply to estimate future defined benefit obligations and net periodic pension expense as well as rates of future pension increases. In addition, our actuarial consultants provide our management with historical statistical information, such as withdrawal and mortality rates in connection with these estimates. Assumptions and estimates used by the Company may differ materially from the actual results we experience due to changing market and economic conditions, higher or lower withdrawal rates, and longer or shorter life spans of participants among other factors. For more information on obligations under retirement and other post-employment benefit plans, underlying actuarial assumptions and sensitivity analysis, see ‘‘Note 22. Employee Retirement Plans.’’

- *Intangible Assets - In-process research and development.* In-process R&D was recognized as part of the acquisition of Caisson, based on detailed valuations that use information and assumptions provided by management, which consider management's best estimates of inputs and assumptions that a market participant would use. The key estimates in the valuation include the discount rate and the expected future cash inflows.

Critical Judgements

- *Commitments and Contingencies.* A number of LivaNova subsidiaries are involved in various government investigations and legal proceedings (product liability, commercial, employment, environmental claims, etc.) arising out of the normal conduct of their businesses. The outcome of these matters is not certain and judgement is required in determining whether these matters require the recognition of a liability. The most significant matter considered in the period relates

to the product remediation plan for our 3T device. For more information, see ‘‘Note 24. *Commitments and Contingencies.*’’

- *Taxes.* We prepare and file our tax returns based on an interpretation of tax laws and regulations and record estimates based on these judgements and interpretations. Our tax returns are subject to examination by the competent taxing authorities, which may result in an assessment being made requiring payments of additional tax, interest or penalties. See "Note 23. Income Taxes" and "Note 24. Commitments and Contingencies."

- *Exceptional Items.* Exceptional items are expense or income items recorded in a period which have been determined by management as being material by their size or incidence and are presented separately within the results of the group. The determination of which items are disclosed as exceptional items will affect the presentation of profit measures and requires a degree of judgement. Details relating to exceptional items reported during the period are set out in "Note 30. Exceptional Items."

Note 3. Financial Risk Management

Management of financial risk

Increasing market fluctuations may result in significant earnings and cash flow volatility risk for LivaNova. The Company’s operating business as well as its investment and financing activities are affected particularly by changes in foreign exchange rates, interest rates and concentration of procurement suppliers. In order to optimize the allocation of the financial resources across the LivaNova franchises and entities, as well as to achieve its aims, LivaNova identifies, analyses and manages the associated market risks. The Company seeks to manage and control these risks primarily through its regular operating and financing activities, and uses derivative financial instruments when deemed appropriate.

The Company’s CFO oversees the management of these risks. The CFO is supported by a senior financial management team that advises on financial risks and the appropriate financial risk governance framework for the Company. The senior financial management team provides assurance to the Company’s senior management that the Company’s financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with policies and risk appetite. All derivative activities for risk management purposes are carried out by teams that have the appropriate skills, experience and supervision. It is the Company’s policy that no trading in derivatives for speculative purposes may be undertaken. Intercompany financing or investments of operating units are preferably carried out in their functional currency or on a hedged basis. The Board of Directors reviews and agrees to policies for managing each of these risks.

Liquidity Risk

Liquidity risk results from the Company’s inability to meet its financial liabilities. LivaNova follows a financing policy that is aimed towards a balanced financing portfolio, a diversified maturity profile and a comfortable liquidity cushion. LivaNova mitigates liquidity risk by the implementation of an effective working capital and centralized cash management and arranged credit facilities with highly rated financial institutions. In addition, LivaNova constantly monitors funding options available in the capital markets, as well as trends in the availability and costs of such funding, with a view to maintaining financial flexibility and limiting repayment risks.

The following tables reflect the undiscounted cash outflows related to settlement and repayments, of the Company’s financial liabilities at a balance sheet date. The disclosed expected undiscounted net cash outflows from derivative financial liabilities are determined based on each particular settlement date of an instrument and based on the earliest date on which LivaNova could be required to pay. Cash outflows for financial liabilities without fixed amount or timing are based on the conditions existing at the respective balance sheet date.

Contractual undiscounted cash outflows were as follows (in thousands):

	31 December 2017				
	Due Within 1 Year	1-2 Years	2-5 Years	Over 5 Years	Total
Non-derivative financial instruments					
Trade payables	$ 84,716	$ —	$ —	$ —	$ 84,716
Financial liabilities	25,844	21,026	38,456	2,476	87,802
Total	$ 110,560	$ 21,026	$ 38,456	$ 2,476	$ 172,518
Financial derivative liabilities					
- on exchange risk	$ 460	$ —	$ —	$ —	$ 460
- on rate risk	834	506	245	—	1,585
Total	$ 1,294	$ 506	$ 245	$ —	$ 2,045

	31 December 2016				
	Due Within 1 Year	1-2 Years	2-5 Years	Over 5 Years	Total
Non-derivative financial instruments					
Trade payables	$ 89,514	$ —	$ —	$ —	$ 89,514
Public grants	—	3,804	—	—	3,804
Financial liabilities	21,301	21,814	50,767	2,634	96,515
Total	$ 110,815	$ 25,618	$ 50,767	$ 2,634	$ 189,833
Financial derivative liabilities					
- on rate risk	$ 942	$ 699	$ 693	$ —	$ 2,334

Foreign Currency Exchange Rate Risk

Foreign exchange risk is the risk that reported financial performance of the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. LivaNova operates in many countries and currencies and therefore currency fluctuations may impact LivaNova's financial results. In the ordinary course of business LivaNova is exposed to foreign currency exchange rate fluctuations, particularly between the USD, Euro, Canadian Dollar, GBP and Japanese Yen. LivaNova is exposed to currency risk in the following areas:

- Transaction exposures, related to anticipated sales and purchases and on-balance-sheet receivables/ payables resulting from such transactions
- Translation exposure of foreign-currency intercompany and external debt
- Translation exposure of net income in foreign entities
- Translation exposure of foreign-currency denominated equity invested in consolidated companies

It is LivaNova's policy to reduce the potential year on year volatility caused by foreign-currency movements on its net earnings by hedging the anticipated net exposure of foreign currencies resulting from foreign-currency sales and purchases. Intercompany financing or investments of operating units are preferably carried out in their functional currency or on a hedged basis. Additionally, foreign currency exchange rate exposure is partly balanced by purchasing of goods, commodities and services in the respective currencies, as well as production activities in the local markets. LivaNova's operating units are prohibited from borrowing or investing in foreign currencies on a speculative basis. The target is to keep up to 80% of consolidated EBITDA denominated in material currencies, hedged against USD, LivaNova's reporting currency. At 31 December 2017, cash flow hedge is carried out for FX net risk positions denominated in Euro, Japanese Yen, Canadian Dollar and the GBP.

Based on our exposure to foreign currency exchange rate risk, a sensitivity analysis indicates that if the USD had uniformly strengthened by 10% against the Canadian Dollar, GBP and the Japanese Yen, in the year ended 31 December 2017, the effect on our unrealised income, for our derivatives outstanding at 31 December 2017, would have been approximately $6.0 million; if the USD had uniformly weakened by 10% against the same currencies, the effect on our unrealized expenses for our derivatives outstanding at 31 December 2017 would have been approximately $7.3 million. We did not engage in derivative contracts prior to the Mergers.

Any gains and losses on the fair value of derivative contracts would generally be offset by gains and losses on the underlying transactions. These offsetting gains and losses are not reflected in the above analysis.

With regard to financial instruments denominated in currencies other than the currency of account of the companies holding them, the currencies involving the greatest exposure are the USD, Euro, GBP and Japanese Yen as indicated below (in thousands):

	31 December 2017					
	EUR	USD	JPY	GBP	Other	Total
Assets						
Cash and cash equivalents denominated in foreign currency	$ 21	$ 58,840	$ 3,220	$ 1,268	$ 5,654	$ 69,003
Trade receivables and other assets denominated in foreign currency	661	30,705	898	—	1,658	33,922
Financial assets denominated in foreign currency	—	417	—	—	—	417
Other assets denominated in foreign currency	12	881	—	122	135	1,150
Total assets	694	90,843	4,118	1,390	7,447	104,492
Liabilities						
Trade payables denominated in foreign currency	2,109	5,754	36	7,549	167	15,615
Financial liabilities denominated in foreign currency	69,894	204	—	—	—	70,098
Other liabilities denominated in foreign currency	208	585	—	4,402	267	5,462
Total liabilities	72,211	6,543	36	11,951	434	91,175
Net exposure	$ (71,517)	$ 84,300	$ 4,082	$ (10,561)	$ 7,013	$ 13,317
Financial derivative assets						
- not for hedging[(1)]	$ —	$ (351)	$ 44	$ (405)	$ 1,232	$ 520
Total assets	—	(351)	44	(405)	1,232	520
Financial derivative liabilities						
- for hedging	—	—	(505)	559	406	460
Net exposure	$ —	$ (351)	$ 549	$ (964)	$ 826	$ 60

(1) For hedging transactions that do not meet the requirements for hedge accounting.

	31 December 2016					
	EUR	USD	JPY	GBP	Other	Total
Assets						
Cash and cash equivalents denominated in foreign currency	$ 282	$ 7,888	$ 3,655	$ 946	$ 4,191	$ 16,962
Trade receivables and other assets denominated in foreign currency	548	24,940	5,325	(76)	5,205	35,942
Other assets denominated in foreign currency	—	318	—	314	10	642
Total assets	830	33,146	8,980	1,184	9,406	53,546
Liabilities						
Trade payables denominated in foreign currency	1	6,639	225	583	212	7,660
Financial liabilities denominated in foreign currency	79,038	71	—	39	—	79,148
Other liabilities denominated in foreign currency	72	316	—	2,899	233	3,520
Total liabilities	79,111	7,026	225	3,521	445	90,328
Net exposure	$ (78,281)	$ 26,120	$ 8,755	$ (2,337)	$ 8,961	$ (36,782)
Financial derivative assets						
- not for hedging [(1)]	$ 725	$ 2,537	$ 307	$ 5	$ —	$ 3,574
- for hedging	—	—	4,186	725	(216)	4,695
Total	725	2,537	4,493	730	(216)	8,269
Net exposure	$ 725	$ 2,537	$ 4,493	$ 730	$ (216)	$ 8,269

(1) For hedging transactions that do not meet the requirements for hedge accounting.

Interest Rate Risk

The Company's main interest rate risk arises from long-term debt with variable rates, which expose the Company to cash flow interest rate risk. LivaNova's policy is to hedge, case by case, medium-long term loans from a floating to a fixed rate, to avoid the impact on net earnings of any potential increase of interest rates. During the year ended 31 December 2017, the Company's debt at variable rates was denominated in Euro.

As at 31 December 2017, LivaNova Group had the following financing denominated in USD:

- a local credit facility in favour of LivaNova Columbia for an amount of $770,000,
- a revolving credit facility of $20 million with Barclays Bank in favour of LivaNova PLC.

We manage a portion of our interest rate risk with contracts that swap floating-rate interest payments for fixed rate interest payments.

As at 31 December 2017 and 31 December 2016, the Company had outstanding derivative contracts to hedge against the risk of interest rate fluctuations in notional amounts of $56.0 million and $63.2 million, respectively, equal to about 38% and 51% of consolidated financial liabilities, respectively.

As at 31 December 2017, if interest rates on Euro-denominated floating rate debt had been 10 basis points higher or lower with all other variables held constant, the calculated post-tax profit for the period would have been approximately $84,000 lower or higher, mainly as a result of higher or lower interest expense on the debt. Other components of equity would have been $502,000 lower as a result of an increase in the interest rate curve with a positive impact on the fair value of our fixed interest rate swaps (derivative

designated for hedge accounting) or $50,000 higher as a result of an decrease in the interest rate curve with a negative impact on the fair value of our fixed interest rate swaps (derivatives designed for hedge accounting).

The following assumptions were used for the sensitivity analysis as at 31 December 2017:

- Unhedged financial liabilities: change of +0.10% - (0.10)% in the rate curve at 31 December 2017 relative to Euro rates;
- Hedged financial liabilities: change of +0.50% - (0.05)% in the rate curve at 31 December 2017 relative to Euro and USD rates.

Credit Risk

Our trade receivables represent potential concentrations of credit risk. This risk is limited due to the large number of customers and their dispersion across a number of geographic areas, as well as our efforts to control our exposure to credit risk by monitoring our receivables, the use of credit approvals and credit limits. Refer to "Note 14. Trade Receivables and Allowance for Bad Debt" for more details. In addition, we have historically had strong collections and minimal write-offs. While we believe that our reserves for credit losses are adequate, essentially all of our trade receivables are concentrated in the hospital and healthcare sectors worldwide, and accordingly, we are exposed to their respective business, economic and country-specific variables. Although we do not currently foresee a concentrated credit risk associated with these receivables, repayment is dependent on the financial stability of these industry sectors and the respective countries' national economies and healthcare systems.

The maximum theoretical credit risk exposure for LivaNova is an aggregate carrying amount of financial assets at each reporting period date (in thousands):

	31 December 2017	31 December 2016
Financial assets	$ 44,184	$ 38,345
Other assets	3,638	1,540
Trade receivables	282,145	275,730
Other receivables	24,519	17,296
Other financial assets	1,395	7,094
Cash and cash equivalents	93,615	39,789
Guarantees	49,217	48,939
Total	$ 498,713	$ 428,733

The risk related to bank accounts, financial assets and assets for financial derivatives is limited since all bank and financial counter-parties have a high rating.

The guarantees issued by LivaNova are primarily due to unconditional bank guarantees, irrevocable letters of credit, bid bonds, guarantees to the governmental tax authorities and tenancy guarantees, and thus, the related credit risk is remote and has been remote as viewed on a historical basis.

Since LivaNova operates in the medical technology sector, there is not a significant risk of customer insolvency, a significant portion of which is related to government agencies, but they are subject to the risk related to cash requirements due to the high level of trade receivables owing to average collection periods (days of sales outstanding) and the ageing of these receivables.

Credit risk is managed on a group basis. For banks and financial institutions, only independently rated parties with a minimum investment grade credit rating are accepted.

For customers, if there is no independent rating, risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external information in accordance with limits set by the Company's Treasury Group. The compliance with and authorization of credit limits by customers is regularly monitored by line management. Additionally, the Company established a Bad Debt Policy, which provides the methodology to be used to calculate an addition to the provision for uncollectable receivables for past-due receivables for each LivaNova entity and the ageing of each receivable.

Changes in provisions for uncollectable receivables are explained in "Note 14. Trade Receivables and Allowance for Bad Debt."

For the purposes of disclosing the credit risk to which LivaNova is exposed, below is a breakdown of trade receivables by due dates (in thousands):

	31 December 2017	31 December 2016
Trade receivables		
Performing	$ 213,856	$ 206,286
Less than 30 days past due	14,173	28,148
31-120 days past due	34,726	21,227
121-365 days past due	14,760	13,320
366-730 days past due	3,139	4,344
Over 730 days past due	1,491	2,405
Total	$ 282,145	$ 275,730

Trade receivables that are past due were $68.3 million and $69.4 million at 31 December 2017 and 31 December 2016, respectively. Of this amount 23.5% and 24.6% at 31 December 2017 and 31 December 2016, respectively, are receivables from certain government hospitals that pay their suppliers in 1-2 years on average, and the remaining are receivables from private customers, clinics and distributors, most of which have agreed to repayment plans through the renegotiation of payment terms.

Trade receivables that are not past due and not written down were $213.9 million and $206.3 million at 31 December 2017 and 31 December 2016, respectively. Of this amount, 15.1% and 16.2% at 31 December 2017 and 31 December 2016, respectively, were the receivables from government (public) hospitals. As indicated in the following table (in thousands):

	31 December 2017			31 December 2016		
	Total	Performing	Past Due	Total	Performing	Past Due
By Sector						
Public	$ 48,296	$ 32,223	$ 16,073	$ 50,542	$ 33,451	$ 17,091
Private	233,849	181,633	52,216	225,188	172,835	52,353
Total	$ 282,145	$ 213,856	$ 68,289	$ 275,730	$ 206,286	$ 69,444

Concentrations of risk by region are provided below to further assess the risk related to the trade receivables (in thousands except D.S.O.):

	31 December 2017				31 December 2016			
	D.S.O.	Total	Performing	Past Due	D.S.O.	Total	Performing	Past Due
By Region								
Italy	191	$ 17,839	$ 12,623	$ 5,216	161	$ 34,473	$ 19,278	$ 15,195
Spain	148	7,766	5,708	2,058	122	13,573	9,002	4,571
France	75	8,374	6,761	1,613	59	22,230	18,262	3,968
Germany	32	3,210	3,162	48	27	3,510	3,273	237
Rest of Europe	73	23,968	14,701	9,267	64	23,160	15,881	7,279
North America	81	134,831	112,226	22,605	57	84,419	70,553	13,866
Japan	80	9,939	9,939	0	78	15,872	16,029	(157)
Rest of world	161	76,218	48,736	27,482	139	78,493	54,008	24,485
Total	96	$ 282,145	$ 213,856	$ 68,289	80	$ 275,730	$ 206,286	$ 69,444

Revenues are derived from a large number of customers with no customers being individually material.

The average collection period increased from 80 days at 31 December 2016 to 96 days at 31 December 2017. The D.S.O. (days of sales outstanding), or average collection period, is calculated as the ratio of total receivables at the end of the period to revenues generated in the 12 preceding months. D.S.O. = (Trade receivables/Revenues) * 365.

For comparability the revenue amounts include VAT.

For the purposes of the disclosure of credit risk, there were no past-due balances of a significant amount related to other assets, other receivables and financial assets.

Capital management

LivaNova maintains a sufficient amount of capital to meet its development needs, fund the business units' operations and ensure the Company continues to be a going concern. The equilibrium of sources of funding, which is also aimed at minimising overall capital costs, is achieved by balancing risk capital contributed on a permanent basis by shareholders, and debt capital, which is in turn diversified and structured with several due dates and in many currencies. To this end, changes in debt levels in relation to both equity and operating profit, and the generation of cash by the business units are constantly kept under control.

Note 4. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. The guidance also establishes a hierarchy for inputs used in measuring fair value that maximises the use of observable inputs and minimises the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use in valuing the asset or liability, based on market data obtained from sources independent of us. Unobservable inputs are inputs that reflect our assumptions about the factors market participants would use in valuing the asset or liability developed based upon the best information available in the circumstances. The categorization of financial assets and financial liabilities within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The hierarchy is broken down into three levels defined as follows:

- Level 1 – Inputs are quoted prices in active markets for identical assets or liabilities

- Level 2 – Inputs include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active and inputs (other than quoted prices) that are observable for the asset or liability, either directly or indirectly

- Level 3 – Inputs are unobservable for the asset or liability

No assets or liabilities are classified as Level 1. Financial assets and liabilities that are classified as Level 2 include derivative instruments, primarily forward and option currency contracts and interest rate swaps contracts, which are valued using standard calculations and models that use readily observable market data as their basis. Level 3 assets include investments in private companies classified as AFS and level 3 liabilities consist of include contingent payments recognised as a result of the acquisition of Cellplex Pty Ltd. and Inversiones Drilltex SAS and contingent consideration recognized as a result of the acquisition of Caisson.

Assets and Liabilities That Are Measured at Fair Value on a Recurring Basis

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

	Fair Value as at 31 December 2017	Fair Value Measurements Using Inputs Considered as:		
		Level 1	Level 2	Level 3
Assets:				
Available-for-sale investments	$ 39,965	$ —	$ —	$ 39,965
Assets held for sale	13,628	—	13,628	—
Derivative Assets – for hedging (exchange rates)	—	—	—	—
Derivative Assets – not for hedging (exchange rates)	519	—	519	—
Total assets	$ 54,112	$ —	$ 14,147	$ 39,965
Liabilities:				
Derivative Liabilities – for hedging (interest rates)	$ 460	$ —	$ 460	$ —
Derivative Liabilities – not for hedging (interest rates)	1,585	—	1,585	—
Derivative Liabilities – not for hedging (exchange rates)	—	—	—	—
Earnout for contingent payments[(1)]	33,973	—	—	33,973
Total Liabilities	$ 36,018	$ —	$ 2,045	$ 33,973

(1) Our recurring fair value measurements, using significant unobservable inputs (level 3), relate solely to our contingent consideration liability. Refer to "Note 19. Provisions" for a the changes in the fair value of our contingent consideration liability.

	Fair Value as at 31 December 2016	Fair Value Measurements Using Inputs Considered as:		
		Level 1	Level 2	Level 3
Assets:				
Available-for-sale investments	$ 33,777	$ —	$ —	$ 33,777
Assets held for sale	4,477	—	—	4,477
Derivative Assets – for hedging (exchange rates)	4,911	—	4,911	—
Derivative Assets – not for hedging (exchange rates)	3,358	—	3,358	—
Total assets	$ 46,523	$ —	$ 8,269	$ 38,254
Liabilities:				
Derivative Liabilities – for hedging (interest rates)	$ 2,334	$ —	$ 2,334	$ —
Derivative Liabilities – not for hedging (interest rates)	—	—	—	—
Derivative Liabilities – not for hedging (exchange rates)	—	—	—	—
Earnout for contingent payments[(1)]	3,890	—	—	3,890
Total Liabilities	$ 6,224	$ —	$ 2,334	$ 3,890

(1) Our recurring fair value measurements, using significant unobservable inputs (level 3), relate solely to our contingent consideration liability. Refer to "Note 19. Provisions" for the changes in the fair value of our contingent consideration liability.

Level 2

To measure the fair value of its derivative transactions (transactions to hedge exchange risk and interest rate risk), we calculate the mark-to-market of each transaction using prices quoted in active markets (e.g. the spot exchange rate of a currency for forward exchange transactions) and observable market inputs processed for the measurement (e.g. the fair value of an interest rate swap using the interest rate curve), or the measurement of an exchange rate option (with the processing of listed prices and observable variables such as volatility).

For all level 2 valuations, we use the information provided by a third-party as a source for obtaining quoted observable prices and to process market variables. In particular, we use the following techniques to calculate the fair value of derivatives:

- For forward exchange rate transactions, fair value is calculated using the forward market exchange rate on the reporting date for each contract. The difference calculated between this amount and the contractual forward rate is discounted (present value) to the same reporting date;

- For interest rate swaps, the fair value is calculated taking into account the present value of interest flows calculated on the notional amount of each contract using the forward interest rate curve applicable on the reporting date.

The derivative valuation models incorporate the credit quality of counterparts, adjustments for counterparts' credit risk and the Company's own non-performance risk.

Level 3

AFS financial assets consist of investments in equity shares and convertible preferred shares of privately held companies for which there are no quoted market prices. During the year ended 31 December 2017, it was determined that the fair value of the investment in Respicardia Inc. was below its carrying value and that the carrying values of this investment was not expected to be recoverable within a reasonable period of time. As a result, an impairment charge of $5.5 million, in addition, during 31 December 2017 we recognized an impairment of our cost-method investment in Rainbow Medical Ltd. An additional round of financing, which included a new investor, indicated that the carrying value of our aggregate investment in Rainbow Medical might not be recoverable and that the decrease in value of our aggregate investment was other than temporary. We, therefore, estimated the fair value of our investment using the income approach. The estimated fair value of our aggregate investment was below our carrying value by $3.0 million. The fair value of the other investments in equity shares approximated their carrying value as at 31 December 2017. These investments fall within Level 3 of the fair value hierarchy due to the use of significant unobservable inputs to determine fair value as the investments are privately held entities without quoted market prices. To determine the fair value of these investments management used all pertinent financial information available related to the entities including valuation reports prepared by third parties. Refer to "Note 12. Financial Assets" for further information.

Transfers

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. Our policy is to recognise transfers into and out of levels within the fair value hierarchy at the end of the fiscal quarter in which the actual event or change in circumstances that caused the transfer occurs. There were no transfers between Level 1, Level 2 or Level 3 during the periods ended 31 December 2017 and 31 December 2016. When a determination is made to classify an asset or liability within Level 3, the determination is based upon the significance of the unobservable inputs to the overall fair value.

Assets and Liabilities that are Measured at Fair Value on a Non-recurring Basis

Non-financial assets such as investments in shares that are accounted for using the cost or equity method, goodwill, intangible assets and property, plant and equipment are measured at fair value when there is an indicator of impairment and recorded at fair value only when impairment is recognised. The fair values of these non-financial assets are based on our own judgements about the assumptions that market participants would use in pricing the asset and on observable market data, when available. We classify these measurements as Level 3 within the fair value hierarchy.

During the year ended 31 December 2017, we recorded an impairment of our investment in, and notes receivable from Highlife of $13.0 million; consisting of investment impairment of $4.7 million and the notes receivable impairment of $8.3 million.

In May 2017, we acquired the remaining equity interests in Caisson and we began consolidating the results of Caisson as of the acquisition date and recognized a pre-tax non-cash gain of $38.1 million.

During the year ended 31 December 2016, we recorded a $5.5 million impairment of our equity-method investment in Respicardia, Inc. This impairment is included in our share of losses from equity method investments in the consolidated statements of income (loss). In addition, during the year ended 31 December 2016, we recorded an impairment of approximately $5.7 million, for our Costa Rica manufacturing plant and equipment. These impairments were triggered by our plan to transfer manufacturing to Houston, Texas from Costa Rica and are included in exceptional Items in the consolidated statements of income (loss). Refer to "Note 9. Property Plant and Equipment" for further information.

Financial Instruments Not Measured at Fair Value

The carrying values of our cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate fair value due to the short-term nature of these items.

The carrying value of our long and short-term debt as of 31 December 2017 and 31 December 2016 was $146.0 million and $122.9 million, respectively, which we believe approximates fair value.

Note 5. Financial Instruments

The Company uses several instruments to fund its operating activities including short and long-term debt from credit institutions and other lenders and short-term bank loans. The Company's other financial instruments consist of trade payables and receivables resulting from operating activities, investments in other companies, assets and liabilities for financial derivatives (primarily interest rate swaps and forward foreign currency contracts) and other receivables and payables other than those related to staff, tax authorities and welfare agencies.

Classification of financial instruments

With regard to classification of financial instruments on the basis of the types as specified in IAS 39, the following should be noted:

- Assets and liabilities for financial derivatives related to contracts entered into to mitigate exchange risk on imports and exports are classified under "Hedging derivatives" when they meet the requirements for being recognised as hedge accounting instruments, and under "Financial assets/liabilities at fair value through profit or loss" when these requirements are not met.

- Assets and liabilities for financial derivatives related to contracts entered into to mitigate interest rate risk are classified under "Hedging derivatives" when they meet the requirements for being recognised as hedge accounting instruments, and under "Financial assets/liabilities at fair value through profit or loss" when these requirements are not met.

- Trade receivables also include those sold to third parties under factoring agreements that do not meet the conditions of IAS 39 for their derecognition from the financial statements. To reflect these sales, payables are recorded for advances received that fall into the category of "Financial liabilities at amortised cost". There were no factoring agreements at 31 December 2017 or 31 December 2016.

Classification of Financial Instruments at 31 December 2017

	Classification						Carrying Amount			
(in thousands)	Financial Assets/ Liabilities at Fair Value Through Profit or Loss	Receivables and Loans	Financial Assets Held to Maturity	Available-For Sale Financial Assets	Financial Liabilities at Amortised Cost	Hedging Derivatives	Total	Current Portion	Non-Current Portion	Fair Value
Assets										
Financial assets	$ —	$ 1,276	$ 2,943	$ 39,965	$ —	$ —	$ 44,184	$ —	$ 44,184	$ 44,184
Other assets	—	3,638	—	—	—	—	3,638	—	3,638	3,638
Trade receivables	—	282,145	—	—	—	—	282,145	282,145	—	282,145
Other receivables	—	24,519	—	—	—	—	24,519	24,519	—	24,519
Financial derivative assets	519	—	—	—	—	—	519	519	—	519
Other financial assets	—	1,395	—	—	—	—	1,395	1,395	—	1,395
Cash and cash equivalents	—	93,615	—	—	—	—	93,615	93,615	—	93,615
Total financial assets	$ 519	$ 406,588	$ 2,943	$ 39,965	$ —	$ —	$ 450,015	$ 402,193	$ 47,822	$ 450,015
Liabilities										
Financial liabilities	$ —	$ —	$ —	$ —	$ 87,802	$ —	$ 87,802	$ 25,844	$ 61,958	$ 87,802
Other liabilities	—	—	—	—	4,927	—	4,927	—	4,927	4,927
Trade payables	—	—	—	—	84,716	—	84,716	84,716	—	84,716
Other payables	—	—	—	—	50,137	—	50,137	50,137	—	50,137
Financial derivative liabilities	—	—	—	—	—	2,045	2,045	1,294	751	2,045
Other financial liabilities	—	—	—	—	58,190	—	58,190	58,190	—	58,190
Total financial liabilities	$ —	$ —	$ —	$ —	$ 285,772	$ 2,045	$ 287,817	$ 220,181	$ 67,636	$ 287,817

Classification of Financial Instruments at 31 December 2016

	Classification						Carrying Amount			
(in thousands)	Financial Assets/ Liabilities at Fair Value Through Profit or Loss	Receivables and Loans	Financial Assets Held to Maturity	Available-For Sale Financial Assets	Financial Liabilities at Amortised Cost	Hedging Derivatives	Total	Current Portion	Non-Current Portion	Fair Value
Assets										
Financial assets	$ —	$ 2,031	$ 2,537	$ 33,777	$ —	$ —	$ 38,345	$ —	$ 38,345	$ 38,345
Other assets	—	1,579	—	—	—	—	1,579	—	1,579	1,579
Trade receivables	—	275,730	—	—	—	—	275,730	275,730	—	275,730
Other receivables	—	21,011	—	—	—	—	21,011	21,011	—	21,011
Financial derivative assets	3,358	—	—	—	—	4,911	8,269	8,269	—	8,269
Other financial assets	—	7,094	—	—	—	—	7,094	7,094	—	7,094
Cash and cash equivalents	—	39,789	—	—	—	—	39,789	39,789	—	39,789
Total financial assets	$ 3,358	$ 347,234	$ 2,537	$ 33,777	$ —	$ 4,911	$ 391,817	$ 351,893	$ 39,924	$ 391,817
Liabilities										
Financial liabilities	$ —	$ —	$ —	$ —	$ 96,516	$ —	$ 96,516	$ 21,301	$ 75,215	$ 96,516
Other liabilities	—	—	—	—	3,285	—	3,285	—	3,285	3,285
Trade payables	—	—	—	—	89,514	—	89,514	89,514	—	89,514
Other payables	—	—	—	—	27,362	—	27,362	27,362	—	27,362
Financial derivative liabilities	—	—	—	—	—	2,334	2,334	942	1,392	2,334
Other financial liabilities	—	—	—	—	26,349	—	26,349	26,349	—	26,349
Total financial liabilities	$ —	$ —	$ —	$ —	$ 243,026	$ 2,334	$ 245,360	$ 165,468	$ 79,892	$ 245,360

Note 6. Business Combinations

Caisson Interventional, LLC Acquisition. On 2 May 2017, we acquired the remaining 51% equity interests in Caisson for a purchase price of up to $72.0 million, net of $6.3 million of debt forgiveness, consisting to $18.0 million paid at closing, $14.4 million to be paid after 12 months, and contingent consideration of up to $39.6 million to be paid on a schedule driven primarily by regulatory approvals and a sales-based earnout. Caisson is focused on the design, development and clinical evaluation of a novel TMVR implant device with a fully transvenous delivery system.

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

Cash[(1)]	$ 16,216
Debt forgiven[(2)]	6,309
Deferred consideration[(1)]	13,455
Contingent consideration[(1)]	30,342
Fair value of consideration transferred	66,322
Fair value of our interest prior to the acquisition[(2)]	52,505
Fair value of total consideration	$ 118,827

(1) Concurrent with the acquisition, we recognized $3.7 million of post-combination compensation expense. Of this amount, $1.8 million is reflected as a reduction of $18.0 million in cash paid at closing of the acquisition, while $1.9 million increased the deferred consideration and contingent consideration liabilities recognized at the date of the acquisition to a total of $14.1 million and $31.7 million, respectively.

(2) On the acquisition date, we remeasured the notes receivable from Caisson and our existing investment in Caisson at fair value and recognized a pre-tax non-cash gain of $1.3 million and $38.1 million, respectively, which are included in 'Gain on acquisition of Caisson Interventional, LLC' in the consolidated statements of income (loss).

We have recorded no adjustments to the preliminary purchase price allocation at fair value for the Caisson acquisition, as presented in the following table (in thousands):

Cash and cash equivalents	$	1,468
In-process research and development		89,000
Goodwill		44,473
Other assets		918
Current liabilities		1,023
Deferred income tax liabilities, net		16,009
Net assets acquired	$	118,827

Acquired goodwill of $9.6 million is expected to be deductible for tax purposes. Additionally, $3.0 million of the initial cash payment was deposited in escrow for future claims indemnification. Of this amount, $2.0 million is included in 'Prepaid expenses and other current assets' and the remaining $1.0 million is included in 'Other long-term assets' in the consolidated balance sheet as of 31 December 2017.

We recognized acquisition-related expenses of approximately $1.3 million for legal and valuation expenses during the year ended 31 December 2017. Additionally, the results of Caisson for the period of 2 May 2017 through 31 December 2017 added no revenue and $20.1 million in expenses in our consolidated statements of income (loss). This included $7.2 million in compensation expense associated with the retention of employees of Caisson.

The contingent consideration arrangements are composed of potential cash payments upon the achievement of certain regulatory milestones 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):

Caisson Acquisition	Fair value at 2 May 2017	Valuation Technique	Unobservable Input	Ranges
Regulatory milestone-based payments	$ 14,250	Discounted cash flow	Discount rate	2.6% - 3.4%
			Probability of payment	90% - 95%
			Projected payment years	2018 - 2023
Sales-based earnout	16,091	Monte Carlo simulation	Discount rate	11.5% - 12.7%
			Sales volatility	36.9%
			Projected years of sales	2019 - 2033
	$ 30,341			

Note 7. Discontinued Operations

On 20 November 2017, we entered into a LOI to sell our CRM Business Franchise to MicroPort Scientific Corporation for $190.0 million in cash, and, on 8 March 2018, we entered into Purchase Agreement. Completion of the transaction is subject to receipt of relevant regulatory approvals, including fulfilling the requirements of the Hong Kong Stock Exchange's Major Transaction requirements, and other customary closing conditions. We expect the transaction to close in the second quarter of 2018.

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 resynchronisation 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 consolidated statements of (loss) income. Additionally we tested the long-lived assets of CRM for impairment utilising fair value less cost to sell and recognized an impairment of tangible and intangible assets of $36.9 million, net of a $8.0 million tax benefit. The impairment is presented separately as Impairment of discontinued operations, net of tax on the consolidated statements of (loss) income since the impairment is significant and resulted from the agreement to sell CRM. The assets and liabilities of CRM are classified as held for sale and presented as assets (or liabilities) of discontinued operations on the consolidated balance sheets at 31 December 2017. All balance sheet data previous to 31 December 2017 reflect the assets and liabilities of the CRM business franchise as previously reported.

The following table presents the assets and liabilities of CRM classified as held for sale and presented as assets and liabilities of discontinued operations in the consolidated balance sheets (in thousands):

		31 December 2017
Property, plant and equipment	$	9,348
Intangible assets		88,239
Equity investments in associated and joint ventures measured at equity		6,098
Deferred tax assets		2,517
Other assets		3,500
Inventories		54,097
Trade receivables		64,684
Tax assets		14,725
Assets of discontinued operations	$	243,208
Provision for employee severance indemnities and other employee benefit provisions	$	9,860
Deferred income tax liability		6,037
Trade payables		26,501
Other payables		23,230
Provisions		3,337
Public grants		2,241
Tax payable		5,084
Liabilities of discontinued operations	$	76,290

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

	Year Ended 31 December 2017	Year Ended 31 December 2016
Net sales	$ 245,171	$ 249,067
Cost of sales	91,632	104,269
Gross profit	153,539	144,798
Operating expenses:		
Selling, general and administrative expenses	109,945	121,644
Research and development	41,992	45,051
Operating profit before exceptional items	1,602	(21,897)
Exceptional items	43,309	91,040
Operating loss	(41,707)	(112,937)
Foreign exchange and other - (loss) gain	(380)	350
Share of loss from equity method investments	(4,887)	(3,933)
Loss before tax	(46,974)	(116,520)
Income tax benefit	(14,644)	(5,195)
Net loss from discontinued operations	$ (32,330)	$ (111,325)

The following exceptional items are included within operating profit above (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Merger and integration expenses	$ 22	$ 160
Restructuring expenses	(1,617)	18,566
CRM Impairment	44,904	72,314
Total exceptional items	$ 43,309	$ 91,040

The following table represents the cash flows from operating, investing and financing activities of CRM presented within the results of the consolidated statements of cash flows (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Net cash provided by operating activities	$ 10,202	$ 3,809
Net cash used in investing activities	(10,202)	(3,809)
Net change in cash and cash equivalents	—	—
Cash and cash equivalents at beginning of period	—	—
Cash and cash equivalents at end of period	$ —	$ —

During the year ended 31 December 2017 we invested $4.5 million in MicroPort Sorin CRM (Shanghai) Co. Ltd. which is included in assets of discontinued operations on the consolidated balance sheets.

The future minimum lease payments for operating leases of CRM as of 31 December 2017 are (in thousands):

No later than 1 year	$ 6,107
Later than 1 year and no later than 5 years	18,234
Later than 5 years	20,388

Note 8. Restructuring Plans

We initiate restructuring 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 the operating results of our consolidated statements of income (loss).

Our 2015 and 2016 Reorganization Plans were initiated October 2015 and March 2016, respectively, in conjunction with the completion of the Mergers. The Plans include the closure of the R&D facility in Meylan, France and consolidation of its research and development capabilities into the Clamart, France facility. In addition, during the year ended 31 December 2016, we initiated a plan to exit the Costa Rica manufacturing operation and transfer its operations to Houston, Texas. We completed the exit of Costa Rica in the first half of 2017 and we plan to complete the 2015 and 2016 Reorganization Plans in the first half of 2018.

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 $5.4 million and accrued $0.5 million of additional costs, primarily related to employee severance, during the year ended 31 December 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 $13.6 million as of 31 December 2017 in the consolidated balance sheet. In December 2017, we executed a letter of intent for the sale of the Suzhou facility.

We estimate that these Plans will result in a net reduction of approximately 324 personnel of which 314 have occurred as of 31 December 2017.

The restructuring plan's liabilities for the period 1 January 2017 to 31 December 2017 are as follows (in thousands):

	Employee Severance and Other Termination Costs	Other	Total
Beginning liability balance	$ 21,092	$ 3,056	$ 24,148
Charges	10,076	5,363	15,439
Cash payments	(27,279)	(5,794)	(33,073)
Ending liability balance	$ 3,889	$ 2,625	$ 6,514

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

	Year Ended 31 December 2017	Year Ended 31 December 2016
Cardiac Surgery[(1)]	$ 8,819	$ 11,042
Neuromodulation[(2)]	561	14,769
Other	7,676	11,566
Restructuring expense from continuing operations	17,056	37,377
Discontinued operations	(1,617)	18,566
Total	$ 15,439	$ 55,943

(1) Cardiac Surgery restructuring expense for the year ended 31 December 2017 included building and equipment impairment of $5.4 million related to the Suzhou, China facility exit plan.

(2) Neuromodulation restructuring expense for the year ended 31 December 2016 included building and equipment impairment of $5.7 million related to the Costa Rica exit plan.

Note 9. Property, Plant and Equipment

(in thousands)	Land	Buildings and Building Improvements	Equipment, Other, Furniture, Fixtures	Capital Investment in Process	Total
At 31 December 2016					
Gross amount	$ 15,181	$ 96,304	$ 150,545	$ 17,012	$ 279,042
Accumulated depreciation and impairment	—	(11,852)	(60,661)	—	(72,513)
Net amount	$ 15,181	$ 84,452	$ 89,884	$ 17,012	$ 206,529
At 31 December 2017					
Gross amount	$ 16,293	$ 80,280	$ 157,520	$ 9,944	$ 264,037
Accumulated depreciation and impairment	—	(11,542)	(74,506)	—	(86,048)
Net amount	$ 16,293	$ 68,738	$ 83,014	$ 9,944	$ 177,989

Changes during the year in the net amount of each category of property, plant and equipment are indicated below (in thousands):

	Land	Buildings and Building Improvements	Equipment, Other, Furniture, Fixtures	Capital Investment in Process	Total
Net Amount at 31 December 2015	$ 15,741	$ 72,708	$ 101,133	$ 41,129	$ 230,711
Additions	—	7,912	9,975	17,469	35,356
Disposals	—	(47)	(2,592)	(68)	(2,707)
Impairment		(2,540)	(8,760)	(149)	(11,449)
Depreciation	—	(4,827)	(30,994)	—	(35,821)
Currency translation (losses)	(243)	(987)	(386)	(1,354)	(2,970)
Reclassifications	346	16,047	21,445	(39,989)	(2,151)
Other Charges	—	—	63	(26)	37
Assets classified as held for sale	(663)	(3,814)	—	—	(4,477)
Net Amount at 31 December 2016	15,181	84,452	89,884	17,012	206,529
Additions	—	1,623	14,273	7,613	23,509
Acquisition of Caisson Interventional, LLC	—	55	465	250	770
Disposals	—	(232)	(2,682)	(420)	(3,334)
Impairment	—	(3,963)	(6,554)	(709)	(11,226)
Depreciation	—	(4,112)	(25,544)	—	(29,656)
Currency translation gains	1,112	6,138	7,680	958	15,888
Reclassifications	—	(714)	11,799	(12,600)	(1,515)
Assets classified as held for sale	—	(13,628)	—	—	(13,628)
Discontinued Operations[(1)]	—	(881)	(6,307)	(2,160)	(9,348)
Net Amount at 31 December 2017	$ 16,293	$ 68,738	$ 83,014	$ 9,944	$ 177,989

(1) Refer to "Note 7. Discontinued Operations."

A building in Cantù, Italy with a net book value of $0.3 million and $0.6 million as at 31 December 2017 and 31 December 2016, respectively, was provided as collateral to secure a long-term loan taken out by Sorin Group Italia S.r.l.

During the year ended 31 December 2017, we initiated a plan to sell our Suzhou Industrial Park facility in Shanghai, China and as a result of this exit plan we recorded impairments of the building and equipment of $5.4 million, which were recorded in Exceptional items in the consolidated statements of income (loss). In addition, we classified the remaining carrying value of the land, building and equipment of our Suzhou facility, of $13.6 million, to assets held for sale in the consolidated balance sheet as of 31 December 2017.

During the year ended 31 December 2016, we initiated a plan to exit the Costa Rica manufacturing operation and transfer those activities to Houston, Texas. Movable machinery and equipment was transferred to various locations, primarily to Europe. As a result of our exit from Costa Rica, we recorded impairments for the building and equipment in 31 December 2016 $5.7 million, which is included in restructuring expenses within exceptional Items in the consolidated statements of income (loss). In addition, the carrying value of $4.5 million of the land and building after impairment was classified as assets held for sale in the consolidated balance sheet as of 31 December 2016.

During the year ended 31 December 2016, an impairment of $5.5 million was recorded against equipment within the CRM cash generating unit. Refer to "Note 10. Goodwill and Intangible Assets" for further details.

Note 10. Goodwill and Intangible Assets

(in thousands)	Goodwill	Developed Technology	Customer Relationships	Trademarks and Trade Names	In-Process R&D	Other Intangible Assets	Software	Total
At 31 December 2016								
Gross amount	$ 711,523	$ 206,048	$ 441,088	$ 12,649	$ —	$ 2,106	$ 27,383	$ 689,274
Accumulated amortisation and impairment	(18,348)	(28,880)	(67,362)	(3,689)	—	(1,226)	(15,569)	(116,726)
Net amount	$ 693,175	$ 177,168	$ 373,726	$ 8,960	$ —	$ 880	$ 11,814	$ 572,548
At 31 December 2017								
Gross amount	$ 787,929	$ 178,610	$ 327,496	$ 14,391	$ 89,000	$ 805	$ 31,653	$ 641,955
Accumulated amortisation and impairment	—	(26,428)	(40,469)	(7,795)	—	(213)	(17,283)	(92,188)
Net amount	$ 787,929	$ 152,182	$ 287,027	$ 6,596	$ 89,000	$ 592	$ 14,370	$ 549,767

The changes in the net carrying value of each class of intangible assets during the year are indicated below (in thousands):

	Goodwill	Developed Technology	Customer Relationships	Trademarks and Trade Names	In-Process R&D	Other Intangible Assets	Software	Total
Net Amount at 31 December 2015	$ 712,150	$ 207,560	$ 445,455	$ 12,487	$ —	$ 265	$ 14,477	$ 680,244
Additions	—	—	—	—	—	1,878	1,128	3,006
Amortisation	—	(15,647)	(28,389)	(3,228)	—	(91)	(5,590)	(52,945)
Impairment	(18,348)	(10,521)	(37,041)	—	—	(962)	(21)	(48,545)
Currency translation (losses)	(627)	(4,224)	(6,299)	(299)	—	(308)	(274)	(11,404)
Reclassifications	—	—	—	—	—	98	2,053	2,151
Other changes	—	—	—	—	—	—	41	41
Net Amount at 31 December 2016	693,175	177,168	373,726	8,960	—	880	11,814	572,548
Acquisition of Caisson Interventional, LLC	44,472	—	—	—	89,000	—	—	89,000
Additions	—	—	—	—	—	1,106	9,491	10,597
Disposals	—	—	—	—	—	(8)	(11)	(19)
Amortisation	—	(15,103)	(23,745)	(3,520)	—	(166)	(6,319)	(48,853)
Impairment	—	(10,375)	(30,361)	—	—	1,014	—	(39,722)
Currency translation gains	50,282	19,699	32,453	1,156	—	(1)	1,148	54,455
Reclassifications	—	—	—	—	—	—	—	—
Discontinued operations[(2)]	—	(19,207)	(65,046)	—	—	(2,233)	(1,753)	(88,239)
Net Amount at 31 December 2017	$ 787,929	$ 152,182	$ 287,027	$ 6,596	$ 89,000	$ 592	$ 14,370	$ 549,767

(1) During the year ended 31 December 2017, we recognized $89.0 million of in-process R&D related to the acquisition of Caisson.
(2) Refer to "Note 7. Discontinued Operations."

Amortisation of intangible assets charged to the consolidated statements of income (loss) totalled $48.9 million and $52.9 million for the year ended 31 December 2017 and 31 December 2016, respectively.

The amortisation periods for our finite-lived intangible assets as at 31 December 2017 were as follows:

	Minimum Life in Years	Maximum Life in Years
Developed technology	9	15
Customer relationships	16	18
Trademarks and trade names	4	4
Other intangible assets	5	5
Software	1	10

Impairment of Goodwill and Intangible Assets

Our CGUs consist of: Cardiac Surgery and Neuromodulation. The carrying amount of goodwill by CGU (in thousands):

	31 December 2017	31 December 2016
Neuromodulation	$ 315,943	$ 315,943
Cardiac Surgery	427,514	377,232
Other	44,472	—
Total	$ 787,929	$ 693,175

We performed a quantitative assessment for our Neuromodulation and Cardiac Surgery CGUs as of 31 December 2017 in accordance with IAS 36 ‘Impairment of Assets’. The methodology applied to most CGUs value in use calculations, reflecting

past experience and external sources of information, include Board approved budgets based on pre-tax cash flows with a CAGR of 1.4% to 6.6% for the next five years, pre-tax discount rates between 8.5% and 10% derived from the Company's benchmarked weighted average cost of capital (WACC), and long-term nominal growth rate of 3%. We concluded that it remains more- likely than not that the Neuromodulation and Cardiac Surgery reporting units' goodwill was not impaired. The value in use model used for calculating fair value is most sensitive to the discount rate as well as the expected future cash inflows and the growth rate for extrapolation purposes. A 1% change in the discount rate or growth rate used would affect the fair value calculated by approximately $200 million for our Cardiac Surgery CGUs at 31 December 2017.

Additionally, we performed a quantitative assessment of the goodwill recognized in conjunction with the acquisition of Caisson which is displayed as "Other" in the table above. The value in use calculation has been based on a 15 year projection period which is consistent with the expected useful economic life of the Caisson technology. The assessment included a discounted cash flow model test that included a discount rate of 18.2% and a long-term growth rate of 2%.

IAS 36 provides that, if there is any reasonably possible change to a key assumption that would cause the CGU's carrying amount to exceed its recoverable amount, further disclosures are required. The value in use calculation resulted in an excess of fair value over carrying value of approximately 5% as the acquisition was recently completed in 2017. We consider the Caisson CGU carrying value to approximate fair value as of year end due to the first year of acquisition and a change of 1% in the discount rate or growth rate used would affect the fair value calculated by $25 million. We concluded that it remains more-likely than not that the goodwill calculated as part of the Caisson acquisition in the current year was not impaired.

Note 11. Investments in Associates, Joint Ventures and Subsidiaries

Equity investments in associates and joint ventures measured at equity.

The table below lists the investments in associates and joint ventures and the balance (in thousands except percentage of ownership):

	Nature of Relationship	% Ownership [1]	31 December 2017	31 December 2016
La Bouscarre S.C.I.	Associate	50%	$ 17	$ 16
Caisson Interventional LLC [2]	Associate	—%	—	16,423
Highlife S.A.S.[3]	Associate	25%	1,782	6,009
MicroPort Sorin CRM (Shanghai) Co. Ltd.[4]	Joint venture	49%	—	4,867
Total			$ 1,799	$ 27,315

(1) Ownership percentages as at 31 December 2017.
(2) On 2 May 2017, we acquired the remaining 51% equity interests in Caisson, and we began consolidating the results of Caisson as of the acquisition date. Refer to "Note 6. Business Combinations" for further information.
(3) During the year ended 31 December 2017, we recognized an impairment of our investment in, and notes receivable from, Highlife. Refer to the paragraph below for further details. In addition, due to additional investments by third parties and the conversion of our note receivable to equity our equity interest fell to 25% from 38% during the year ended 31 December 2017.
(4) During the year ended 31 December 2017 we invested $4.5 million in MicroPort. In addition, due to the sale of CRM to MicroPort, our investment in MicroPort is held in 'Assets of discontinued operations' on the consolidated balance sheets as at 31 December 2017.

Highlife Impairment

We recognized an impairment of our equity-method investment in, and notes receivable from, Highlife during the year ended 31 December 2017. Certain factors, including a revision in our investment strategy and a new strategic investor, indicated that the carrying value of our aggregate investment might not be recoverable and that the decrease in value of our aggregate investment was other than temporary. We, therefore, estimated the fair value of our investment and notes receivable using the market approach. The estimated fair value of our aggregate investment was below our carrying value by $13.0 million. This aggregate impairment was included in share of loss from equity method investments in the consolidated statements of income (loss).

Summarised financial information for all individually not material associates and joint ventures not adjusted for the percentage of ownership held by the Company, is presented below (in thousands):

	Revenue	Net Loss	Total Assets	Equity
Highlife S.A.S.	$ —	$ 1,740	$ 4,182	$ 3,333

The summarised financial information of the associates and joint ventures include adjustments made by the Company when using the equity method, such as fair value adjustments made at the time of acquisition and adjustments for differences in accounting policies. The share of loss from equity method investments of $16.7 million includes the share of net loss included in the table above as well as the $13.0 million impairment in Highlife.

Refer to "Note 27. Related Parties*"* for details of transactions and balances between the Company and its associates and joint ventures. The associates and joint ventures had no contingent liabilities or capital commitments as at 31 December 2017. The Company has no contingent liabilities relating to its interests in the associates and joint ventures.

Principal subsidiaries. The Company had the following subsidiaries and associates as at 31 December 2017:

	Registered Office	Currency	% Consolidated Group Ownership
LivaNova PLC (Italian Branch)	Via Benigno Crespi 17 20159 Milan, Italy	EUR	100
Caisson Interventional LLC	10900 73rd Ave N Ste 116, Maple Grove, MN 55339 USA	USD	49
Cardiosolutions Inc.	375 West Street, West Bridgewater, MA 02379 USA	USD	35
Cyberonics Holdings LLC	100 Cyberonics Boulevard, Houston, TX 77058 USA	USD	100
Cyberonics Latam SRL	Edificio B49, 51 Ave O, Zona Franca Coyo, Coyo-Alajeuela, Costa Rica 20113	CRC	100
Cyberonics Netherlands CV	100 Cyberonics Boulevard, Houston, TX 77058 USA	EUR	100
Cyberonics Spain SL	100 Cyberonics Boulevard, Houston, TX 77058 USA	EUR	100
Enopace Biomedical Ltd	15 Alon Hatavor St, Caesaria 38900 Israel	USD	32
ImThera Medical, Inc.	12555 High Bluff Dr, Ste 310, San Diego, CA 92130 USA	USD	16
La Bouscarre S.C.I.	Route de Revel 31450 Fourquevaux France	EUR	50
LivaNova Australia PTY Limited	16-18 Hydrive Close - Dandenong South - Victoria 3175, Australia	AUD	100
LivaNova Austria GmbH	Donau City Strasse 11/16 1220 Wien, Austria	EUR	100
LivaNova Belgium NV	Ikaroslaan 83, 1930 Zaventem, Belgium	EUR	100
Livanova Brasil Comércio e Distribuição de Equipamentos Médico-hospitalares Ltda	Rua Liege, 54 – Vila Vermelha, 04298-070 – São Paulo - SP - Brasil	BRL	100
LivaNova Canada Corp.	280 Hillmount Road, Unit 8, Markham, ON L6C 3A1 Canada	CAD	100
LivaNova Colombia Sas	Avenida Calle 80 No. 69-70 Bodega 37, Bogotá, Colombia	COP	100
LivaNova Deutschland GmbH	Lindberghstrasse 25, D - 80939 München, Germany	EUR	100
LivaNova Espana, S.L.	Avenida Diagonal 123, planta 10, 08005, Barcelona, Spain	EUR	100
LivaNova Finland OY	c/o Kalliolaw Asianajotoimisto Oy, Södra kajen 12, 00130 Helsinki, Finland	EUR	100
LivaNova France SAS	4 avenue Reaumur 92134 Clamart, France	EUR	100
LivaNova Holding S.r.l.	Via Benigno Crespi, 17 - 20159 Milano, Italy	EUR	100
LivaNova Holding SAS	4 avenue Reaumur 92134 Clamart, France	EUR	100
LivaNova Holding USA Inc.	14401 W. 65th Way - Arvada, CO 80004 USA	USD	100
LivaNova Inc.	1570 Sunland LN, Costa Mesa, CA 92626 USA	USD	100
LivaNova India Private Limited	Barakhamba Road 110001 New Delhi, India	INR	100
LivaNova IP Limited	20 Eastbourne Terrace, London, England W2 6LG, United Kingdom	EUR	100
LivaNova Japan K.K.	11-1 Nagatacho 2 chome, Chiyoda-ku, Tokyo, 100-6110 Japan	JPY	100
LivaNova Nederland N.V.	Westerdoksdijk 423, 1013 BX, Amsterdam, Netherlands	EUR	100
LivaNova Norway AS	c/o AmestoAccounthouse AS, Smeltedigelen 1, 0195 Oslo, Norway	NOK	100
LivaNova Poland Sp. Z o.o.	Park Postepu Bud A Ul. Postepu 21 PL-02 676 Warszawa, Poland	PLN	100
LivaNova Portugal, Lda	Edificio Zenith, Rua Dr. António L. Borges n. 9/9 a - 6a - Miraflores - 1495-131 Algés, Portugal	EUR	100
LivaNova Scandinavia AB	Djupdalsvägen 16, 192 51 Sollentuna, Scandinavia	EUR	100
LivaNova Singapore Pte Ltd	The Adelphi, 1 Coleman Street, #10-07, Singapore 179803	SGD	100
LivaNova Site Management S.r.l.	Via Benigno Crespi 17 20159 Milan, Italy	EUR	100
LivaNova Switzerland SA	WTC Av. Grattapaille 2 1018 Lausanne CH, Switzerland	EUR	100
LivaNova UK Limited	1370 Montpellier Court, Gloucester Business Park, Gloucester, Gloucestershire, GL3 4AH, United Kingdom	EUR	100

	Registered Office	Currency	% Consolidated Group Ownership
LivaNova USA Inc.	100 Cyberonics Boulevard, Houston, TX 77058 USA	USD	100
Livn Irishco 2 UC	70 Sir John Rogerson's Quay, Dublin 2, Ireland	EUR	100
Livn Irishco 3 Unlimited Company	70 Sir John Rogerson's Quay, Dublin 2, Ireland	EUR	100
Livn Irishco Unlimited Company	70 Sir John Rogerson's Quay, Dublin 2, Ireland	EUR	100
Livn Luxco 2 Sarl	15 Rue Edward Steichen L-2540 Luxembourg	EUR	100
Livn Luxco Sarl	15 Rue Edward Steichen L-2540 Luxembourg	EUR	100
Livn UK 2 Co Limited	20 Eastbourne Terrace, London, England W2 6LG, United Kingdom	EUR	100
Livn UK 3 Co Limited	20 Eastbourne Terrace, London, England W2 6LG, United Kingdom	EUR	100
Livn UK Holdco Limited	20 Eastbourne Terrace, London, England W2 6LG, United Kingdom	EUR	100
Livn US 1, LLC	2711 Centerville Road, Suite 400, Wilmington, DE 19808	USD	100
Livn US 3 LLC	2711 Centerville Road, Suite 400, Wilmington, DE 19808 USA	USD	100
Livn US Holdco, Inc.	1209 Orange Street, Wilmington, DE 19801 USA	USD	100
Livn US Lp	2711 Centerville Road, Suite 400, Wilmington, DE 19808 USA	USD	100
MicroPort Sorin CRM (Shanghai) Co. Ltd	Room 101 Bleg 2 501 Newtone Rd 201203 Shanghaî, China	CNY	49
MicroPort CRM Srl	Saluggia (Vercelli) - Italy, via Crescentino snc	EUR	100
Sobedia Energia	Via Crescentino sn 13040 Saluggia (VC), Italy	EUR	75
Sorin CRM SAS	4 avenue Reaumur 92134 Clamart, France	EUR	100
Sorin Group Czech Republic	Na poriçi 1079/3a Nové Mesto Praha 110 00 Praha 1, Czech Republic	EUR	100
Sorin Group DR, S.r.l.	Edificio I-3Zona Franca Industrial de las Americas, Autopista Las Americas Km 22 Z.F. Santo Domingo Este, Dominican Republic	USD	100
Sorin Group Italia S.r.l.	Via Benigno Crespi, 17 - 20159 Milano, Italy	EUR	100
Sorin Group Rus LLC	Marshal Proshlyakov str. 30 office 304 123458 Moscow, Russia	RUB	100
Sorin Medical (Shanghai) Co. Ltd	Room 218, 2nd Floor, No. 56 Meisheng Road, China (Shanghai) Pilot Free Trade Zone	CNY	100
Sorin Medical Devices (Suzhou) Co. Ltd	No. 130, Weihe Road, Suzhou Industrial Park, Jiangsu Province, PRC	CNY	100

All subsidiary undertakings are included in the consolidation. The proportion of the voting rights in the subsidiary undertakings held directly by the parent company do not differ from the proportion of Ordinary Shares held.

Operating performance of the main group companies.

(thousands of euros)	Sorin Group Italia S.r.l. For The Year Ended 31 December 2017
Net revenues	383,744
EBIT	(9,260)
Net profit/(loss)	(4,773)

LivaNova Holding USA, Inc. (thousands of USD)	For The Year Ended 31 December 2017
Net revenues	105,879
EBIT	(2,544)
Net profit/(loss)	28,682

Sorin CRM S.A.S. (thousands of euros)	For The Year Ended 31 December 2017
Net revenues	168,838
EBIT	(37,052)
Net profit/(loss)	(46,812)

LivaNova Deutschland GmbH[1] (thousands of euros)	For The Year Ended 31 December 2017
Net revenues	119,134
EBIT	15,803
Net profit/(loss)	9,887

(1) LivaNova Deutschland GmbH is a 100% consolidated LivaNova group company that is formally exempt for FS 2017 from GERMAN GAAP auditing and publishing.

LivaNova Canada Corp. (thousands of Canadian dollars)	For The Year Ended 31 December 2017
Net revenues	137,910
EBIT	35,187
Net profit/(loss)	17,463

LivaNova USA, Inc. (thousands of USD)	For The Year Ended 31 December 2017
Net revenues	492,558
EBIT	79,796
Net profit/(loss)	(20,656)

Note 12. Financial Assets

Non-Current Financial Assets

(in thousands)	31 December 2017	31 December 2016
Investments in equity instruments in privately-held companies	$ 39,965	$ 33,777
Financial receivables due from associated companies	417	1,870
Corporate owned life insurance policies	2,943	2,537
Other	859	161
Total non-current financial assets	$ 44,184	$ 38,345

The table below lists our non-current financial assets of investments in equity instruments in privately-held companies classified as available-for-sale in the consolidated balance sheets (in thousands):

	31 December 2017	31 December 2016
Respicardia Inc.[1]	$ 17,422	$ 17,518
ImThera Medical, Inc. - convertible preferred shares and warrants[2]	20,172	12,000
Rainbow Medical Ltd.[3]	1,172	3,733
MD Start II	1,199	526
Total	$ 39,965	$ 33,777

(1) 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 CSA by transvenous stimulating the phrenic nerve. During the year ended 31 December 2017, we converted a loan to Respicardia of $1.5 million to equity, we recorded an impairment of $5.5 million and we recorded an FX gain of $3.9 million, Refer to the paragraph below for further details regarding the impairment.

(2) ImThera Medical, Inc. is a private U.S. company developing a neurostimulation device system for the treatment of obstructive sleep apnea. On 16 January 2018, we acquired the remaining outstanding interests in ImThera. Refer to "Note 33. Events after the Reporting Period" for a discussion of our acquisition of ImThera. At December 31, 2018 we recorded an unrealized gain of $7.3 million to other comprehensive income to reflect the change in fair value of our investment in ImThera.

(3) Rainbow Medical Ltd. is an Israeli company that seeds and grows companies developing medical devices in a diverse range of medical fields. During the fourth quarter of 2017, we impaired our investment in Rainbow Medical. Refer to the paragraph below for further details.

Respicardia Impairment

We recognized an impairment of our cost-method investment in Respicardia during the year ended 31 December 2017. Terms of an additional round of financing with a new strategic investor indicated that the carrying value of our aggregate investment might not be recoverable and that the decrease in value of our aggregate investment was other than temporary. We, therefore, estimated the fair value of our investment using the income approach. The estimated fair value of our investment was below our carrying value by $5.5 million. This impairment was included in impairment of cost-method investments in the consolidated statements of income (loss).

Rainbow Medical Impairment

We recognized an impairment of our cost-method investment in Rainbow Medical during the year ended 31 December 2017. An additional round of financing, which included a new investor, indicated that the carrying value of our aggregate investment might not be recoverable and that the decrease in value of our aggregate investment was other than temporary. We, therefore, estimated the fair value of our investment using the income approach. The estimated fair value of our aggregate investment was below our carrying value by $3.0 million. This aggregate impairment was included in impairment of cost-method investments in the consolidated statements of income (loss).

Istituto Europeo di Oncologia S.R.L Sale

During the year ended 31 December 2017, we sold our investment in Istituto Europeo di Oncologia S.R.L, for a gain of $3.2 million. This gain is included in foreign exchange and other - gain in the consolidated statements of income (loss).

Current Financial Assets:

(in thousands)	31 December 2017	31 December 2016
Financial receivables due from associated companies[1]	$ 1,000	$ 6,852
Other	395	242
Total current financial assets	$ 1,395	$ 7,094

(1) We recognized an impairment of our notes receivable from Highlife during the year ended 31 December 2017 of $8.3 million. This impairment was included in "Share of loss from equity method investments" in the consolidated statements of income (loss). In addition, refer to "Note 11. Investment in Associates, Joint Ventures and Subsidiaries" for further information regarding recognition of impairment of our investment in Highlife's preferred stock.

Note 13. Inventories

Inventories consisted of the following (in thousands):

	31 December 2017	31 December 2016
Raw materials	$ 39,810	$ 47,704
Work-in-process	18,206	32,316
Finished goods	86,454	103,469
Total	$ 144,470	$ 183,489

Inventories are reported net of the provision for obsolescence which totalled $10.5 million and $9.8 million as at 31 December 2017 and 31 December 2016, respectively. The provision for obsolescence at 31 December 2017 reflects normal obsolescence and includes components that are phased out or expired.

Note 14. Trade Receivables and Other Receivables

Trade receivables, net, consisted of the following (in thousands):

	31 December 2017	31 December 2016
Trade receivables from third parties	$ 288,127	$ 285,336
Allowance for bad debt	(5,982)	(9,606)
Total	$ 282,145	$ 275,730

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.

Trade receivables are reported net of the allowance for bad debt provision, the changes in which are provided below (in thousands):

	31 December 2017	31 December 2016
Beginning of period	$ (9,606)	$ (1,653)
Additions to provision	(1,801)	(8,004)
Utilisation	240	23
Release of provisions	—	—
Reclassifications	(171)	(83)
Currency translation gains/losses	(1,137)	111
Discontinued operations	6,493	—
End of period	$ (5,982)	$ (9,606)

Actual collection periods for trade receivables vary significantly due to the nature of a customer (e.g. government or private) and its geographic location. LivaNova may utilize non-recourse and with-recourse factoring arrangements as a part of its funding policy; however, as at 31 December 2017 and 31 December 2016, there are no factoring arrangements outstanding.

Below is a summary of other receivables (in thousands):

	31 December 2017	31 December 2016
Prepaid assets	$ 13,372	$ 11,424
Escrow deposit - Caisson	2,000	—
Earthquake grant receivable	4,064	4,748
Deposits and advances to suppliers	4,551	3,440
Guarantee deposits	532	1,551
Total	$ 24,519	$ 21,163

Note 15. Derivative Financial Instruments

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 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 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 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 other comprehensive income (loss) until the hedged item is recognized in earnings upon settlement/termination. FX derivative gains and losses in OCI are reclassified to the consolidated statements of income (loss) as shown in the tables below and interest rate swaps gains and losses in OCI are a reclassified to interest expense in the consolidated statements of income (loss). 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 consolidated statements of cash flows. .

Freestanding derivative foreign currency contracts

The gross notional amount of our FX derivative contracts not designated as hedging instruments, outstanding at 31 December 2017 and 31 December 2016, was $231.9 million and $489.1 million, respectively.

The amount and location of the (losses) gains in the consolidated statements of income (loss) related to freestanding FX derivative contracts (in thousands):

Derivatives Not Designated as Hedging Instruments	Location	Year Ended 31 December 2017	Year Ended 31 December 2016
FX derivative contracts	Foreign exchange and other	$ (11,678)	$ 10,960

Cash Flow Hedges

Foreign Currency Risk

We utilize FX derivative contracts, designed as cash flow hedges, to hedge the variability of cash flows associated with our 12 month USD forecasts of revenues denominated in GBP, Japanese Yen and Canadian Dollar. We transfer to earnings from accumulated other comprehensive income (loss), the gain or loss realized on the FX derivative contracts at the time of invoicing.

There was no hedge ineffectiveness and there were no components of the FX derivative contracts excluded in the measurement of hedge effectiveness during the year ended 31 December 2017 and 31 December 2016 .

During the year ended 31 December 2016, we discontinued and settled certain of our FX derivative contracts due to changes in our foreign currency revenue forecast that resulted in a gain of $0.2 million reclassified to earnings from accumulated other comprehensive (loss).

Interest Rate Risk

In July 2014, Sorin entered into a European Investment Bank long-term loan agreement that matures in June 2021 with variable interest payments due quarterly based on the Euribor 3 month floating interest rate. To minimize the impact of changes in the interest rate we entered into an interest rate swap agreement program to swap the EIB floating-rate interest payments for fixed-rate interest payments. The interest rate swap contracts qualify for, and are designated as, cash flow hedges.

There was no interest rate swap hedge ineffectiveness or component of the swap contract excluded in the measurement of hedge effectiveness during the years ended 31 December 2017 and 31 December 2016.

Open derivative contracts designated as cash flow hedges (in thousands):

Description of derivative contract:	31 December 2017	31 December 2016
FX derivative contracts to be exchanged for GBP	$ 16,847	$ 6,663
FX derivative contracts to be exchanged for Japanese Yen	32,302	57,840
FX derivative contracts to be exchanged for Canadian Dollars	16,494	—
Interest rate swap contracts	55,965	63,246

After-tax net loss associated with derivatives designated as cash flow hedges recorded in the ending balance of Accumulated Other Comprehensive Loss and the amount expected to be reclassified to earnings in the next 12 months (in thousands):

	31 December 2017	Amount Expected to be Reclassed to Earnings in Next 12 Months
FX derivative contracts	$ (712)	$ (712)
Interest rate swap contracts	(207)	(59)
Total	$ (919)	$ (771)

Presentation in Financial Statements

Pre-tax gains (losses) posted to other comprehensive income and the amount reclassified to earnings for derivative contracts designated as cash flow hedges (in thousands):

		Year Ended 31 December 2017	
Description of derivative contract	Location in earnings of reclassified gain or loss	Losses Recognized in OCI	Gains (Losses) Reclassified from OCI to Earnings:
FX derivative contracts	Foreign Exchange and Other	$ (9,861)	$ (6,471)
FX derivative contracts	SG&A	—	2,084
Interest rate swap contracts	Interest expense	0	939
Total		$ (9,861)	$ (3,448)

		Year Ended 31 December 2016	
Description of derivative contract	Location in earnings of reclassified gain or loss	Gains Recognized in OCI	Gains Reclassified from OCI to Earnings:
FX derivative contracts	Foreign Exchange and Other	$ 2,874	$ 3,705
FX derivative contracts	SG&A	—	(4,218)
Interest rate swap contracts	Interest expense	85	(458)
Total		$ 2,959	$ (971)

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

31 December 2017	Asset Derivatives		Liability Derivatives	
Derivatives designated as hedging instruments	**Balance Sheet Location**	**Fair Value [1]**	**Balance Sheet Location**	**Fair Value [1]**
Interest rate contracts	Current financial derivative assets	$ —	Current financial derivative liabilities	$ 834
Interest rate contracts	Non-current financial derivative assets	—	Non-current financial derivative liabilities	751
Foreign currency exchange rate contracts	Current financial derivative assets	—	Current financial derivative liabilities	460
Total derivatives designated as hedging instruments		—		2,045
Derivatives not designated as hedging instruments				
Foreign currency exchange rate contracts	Current financial derivative assets	519	Current financial derivative liabilities	—
Total derivatives not designated as hedging instruments		519		—
Total derivatives		$ 519		$ 2,045

(1) For the classification of input used to evaluate the fair value of our derivatives, refer to "Note 4. Fair Value Measurements."

31 December 2016	Asset Derivatives		Liability Derivatives	
Derivatives designated as hedging instruments	**Balance Sheet Location**	**Fair Value [1]**	**Balance Sheet Location**	**Fair Value [1]**
Interest rate contracts	Current financial derivative assets	$ —	Current financial derivative liabilities	$ 942
Interest rate contracts	Non-current financial derivative assets	—	Non-current financial derivative liabilities	1,392
Foreign currency exchange rate contracts.	Current financial derivative assets	4,911	Current financial derivative liabilities	—
Total derivatives designated as hedging instruments		4,911		2,334
Derivatives not designated as hedging instruments				
Foreign currency exchange rate contracts	Current financial derivative assets	3,358	Current financial derivative liabilities	—
Total derivatives not designated as hedging instruments		3,358		—
Total derivatives		$ 8,269		$ 2,334

(1) For the classification of input used to evaluate the fair value of our derivatives, refer to "Note 4. Fair Value Measurements."

Note 16. Shareholders' Equity

LivaNova is incorporated in England and Wales as a public company limited by shares. The principal legislation under which LivaNova operates is the Companies Act 2006, and regulations made thereunder. LivaNova Ordinary Shares were registered under the U.S. Securities Act, pursuant to the Registration Statement on Form S-4 (File No. 333-203510), as amended, filed with the SEC by LivaNova and declared effective on 19 August 2015. LivaNova's Ordinary Shares are listed on Nasdaq under the ticker symbol "LIVN."

The Company's authorised share capital is as following:

(in number of shares)	31 December 2017	31 December 2016
Authorised share capital, Ordinary Shares of £1 each, unlimited shares authorized		
Issued – fully paid	48,290,276	48,156,690
Outstanding	48,287,346	48,028,413

Preferred shares. LivaNova is not authorised to issue preferred shares.

Share repurchase plans. On 1 August 2016, the Board of Directors authorized a share repurchase plan pursuant to an authority granted by shareholders at the 2016 annual general meeting held on 15 June 2016. The repurchase program was structured to enable us to buy back up to $30 million of Ordinary Shares on Nasdaq in the period ended 31 December 2016 and an aggregate of $150 million of Ordinary Shares (inclusive of the $30 million of Ordinary Shares set out above) also on Nasdaq up to and including 31 December 2018. In November 2016, the share repurchase plan was amended to authorize the repurchase up to $50 million of Ordinary Shares through 31 December 2016 (instead of the originally authorized $30 million). As of 31 December 2016, we purchased 993,339 shares under this plan at a cost of $50 million at an average price per share of $50.32. All repurchased shares were canceled and are no longer considered issued or outstanding. We did not repurchase any additional shares during the year ended 31 December 2017.

Group reconstruction reserve. The 'Group reconstruction reserve' represents the excess of value attributed to shares and share appreciation rights issued during the acquisition of Sorin S.p.A on 19 October 2015 over the nominal value of those shares and share rights.

Comprehensive income

The table below presents the change in each component of accumulated other comprehensive income (loss), net of tax and the reclassifications out of accumulated other comprehensive income into net earnings.

Taxes were not provided for foreign currency translation adjustments for the year ended 31 December 2017 as translation adjustment related to earnings that are intended to be reinvested in the countries where earned.

(in thousands)	Change in Unrealised gain (loss) on investments	Change in Unrealised Gain (Loss) on Derivatives	Foreign Currency Translation Adjustments	Revaluation of Net Liability (Asset) for Defined Benefits	Total
Beginning Balance - 31 December 2015	—	$ 888	$ (65,170)	$ (130)	$ (64,412)
Other comprehensive income (loss) before reclassifications, before tax	—	2,959	(6,964)	(1,629)	(5,634)
Tax benefit (expense)	—	(795)	—	476	(319)
Other comprehensive income (loss) before reclassifications, net of tax	—	2,164	(6,964)	(1,153)	(5,953)
Reclassification of gain/(loss) from accumulated other comprehensive income, before tax	—	971	—	—	971
Tax effect	—	(404)	—	—	(404)
Reclassification of gain/(loss) from accumulated other comprehensive income, after tax	—	567	—	—	567
Net current-period other comprehensive income (loss), net of tax		2,731	(6,964)	(1,153)	(5,386)
Ending Balance - 31 December 2016	—	$ 3,619	$ (72,134)	$ (1,283)	$ (69,798)
Other comprehensive income (loss) before reclassifications, before tax	7,272	(9,861)	112,623	(327)	109,707
Tax benefit (expense)	(1,782)	2,653	—	64	935
Other comprehensive income (loss) before reclassifications, net of tax	5,490	(7,208)	112,623	(263)	110,642
Reclassification of gain/(loss) from accumulated other comprehensive income, before tax	—	3,448	—	—	3,448
Tax effect	—	(778)	—	—	(778)
Reclassification of gain/(loss) from accumulated other comprehensive income, after tax	—	2,670	—	—	2,670
Net current-period other comprehensive income (loss), net of tax	5,490	(4,538)	112,623	(263)	113,312
Ending Balance - 31 December 2017	$ 5,490	$ (919)	$ 40,489	$ (1,546)	$ 43,514

Note 17. Financial Liabilities

The outstanding principal amount of long-term debt at 31 December 2017 and at 31 December 2016 consisted of the following (in thousands, except interest rates):

	Principal Amount at 31 December 2017	Principal Amount at 31 December 2016	Maturity	Effective Interest Rate
European Investment Bank	$ 69,893	$ 78,987	June 2021	0.95%
Mediocredito Italiano	9,118	7,276	December 2023	0.50% – 3.10%
Banca del Mezzogiorno	5,499	6,747	December 2019	0.50% – 3.15%
Bpifrance (ex-Oséo).	1,450	1,909	October 2019	2.58%
Novalia SA (Vallonie)	845	798	December 2023 - June 2033	0.00% – 2.45%
Mediocredito Italiano	997	799	September 2021 and September 2026	0.80% – 1.30%
Total long-term facilities	87,802	96,516		
Less current portion of long- term debt	25,844	21,301		
Total long-term debt	$ 61,958	$ 75,215		

Cash movements associated with the outstanding principal amounts of our long-term debt for the year ended 31 December 2017 included the following:

	Beginning of fiscal year 2017	Borrowing	Scheduled principal reductions	Amortization of prepaid loan fees	FX - Translation	End of fiscal year 2017
European Investment Bank	$ 78,987	$ —	$ (18,825)	$ 6	$ 9,738	$ 69,906
Banca del Mezzogiorno	6,747	—	(2,050)	—	831	5,528
Mediocredito Italiano	7,276	2,048	(1,140)	3	896	9,083
Bpifrance (ex-Oséo)	1,909	—	(680)	—	235	1,464
Region Wallonne	798	—	(60)	—	98	836
Mediocredito Italiano - mortgages and other	799	—	—	87	99	985
Totals	$ 96,516	$ 2,048	$ (22,755)	$ 96	$ 11,897	$ 87,802

The outstanding principal amount of our short-term unsecured revolving credit agreements and other agreements with various banks was $58.2 million and $26.3 million at 31 December 2017 and 31 December 2016, respectively, with interest rates ranging from 0.1% and 9.3% and loan terms ranging from one day to 180 days.

Note 18. Other Non-Current Liabilities

(in thousands)	31 December 2017	31 December 2016
Amounts due to employees	$ 5,390	$ 1,084
Escrow indemnity liability - Caisson	1,000	—
Unfavorable operating leases	252	1,672
Other	3,676	1,613
Total	$ 10,318	$ 4,369

The unfavourable operating leases were acquired in the acquisition of Sorin S.p.A.at 19 October 2015.

Note 19. Provisions

The provisions in the table below are expected to result in payments within the next year.

Current Provisions

(in thousands)	31 December 2017	31 December 2016
Product remediation	$ 16,811	$ 23,464
Restructuring reserve	3,560	16,859
Escrow indemnity liability - Caisson	2,000	—
Contractual warranty reserve	1,476	2,736
Other	4,863	7,642
Total	$ 28,710	$ 50,701

Non-Current Provisions

(in thousands)	31 December 2017	31 December 2016
Contingent consideration[(1)]	$ 33,973	$ 3,890
Liability for uncertain tax provisions (inclusive of penalties and interest)	18,306	16,857
Product remediation	10,735	10,023
Restructuring reserve	392	—
Other	—	237
Total	$ 63,406	$ 31,007

(1) The contingent consideration liability represents contingent payments related to three acquisitions: the first and second acquisitions, in September 2015, were Cellplex PTY Ltd. in Australia and the commercial activities of a local distributor in Colombia. The contingent payments for the first acquisition are based on achievement of sales targets by the acquiree through 30 June 2018 and the contingent payments for the second acquisition are based on sales of cardiopulmonary disposable products and heart lung machines of the acquiree through December 2019. The third acquisition, Caisson, occurred in May 2017. Refer to "Note 6. Business Combinations."

Product Remediation. In December 2015, we received an FDA Warning Letter alleging certain In December 2015, we received an FDA Warning Letter alleging certain violations of FDA regulations applicable to medical device manufacturing at our Munich, Germany and Arvada, Colorado facilities. On 13 October 2016 the Centers for Disease Control and Prevention 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 31 December 2016, we recognized a liability for a product remediation plan related to our 3T Heater-Cooler 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 for 3T device users who have reported confirmed M. chimaera mycobacterium contamination. Although the deep disinfection service is not yet available in the U.S., it is currently offered in many countries around the world and will be expanded to additional geographies as we receive the required regulatory approvals. 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.

For further information, please refer to "Note 24. Commitments and Contingencies." At this stage, no liability has been recognized with respect to any lawsuits involving the Company related to the 3T Heater Cooler and the related legal costs will be expensed as incurred.

Warranties. We offer a warranty on various products. We estimate the costs that may be incurred under the warranties and record a liability in the amount of such costs at the time the product is sold. The amount of the reserve recorded is equal to the cost to satisfy the claim. We include the costs associated with claims, if any, in cost of sales in the consolidated statements of income (loss).

Restructuring reserve. Refer to "Note 8. Restructuring Plans*"* for more details.

The changes in the carrying value of current provisions during the year are indicated below (in thousands):

	Restructuring Reserve	Warranties Reserve	Product Remediation	Escrow Indemnity Liability - Caisson	Other Reserves	Total
31 December 2015	$ 4,720	$ 2,119	$ —	$ —	$ 6,871	$ 13,710
Additions to provision	26,770	1,359	27,510	—	1,872	57,511
Utilisation	(13,726)	(762)	(4,046)	—	(928)	(19,462)
Release of provisions	(636)	—	—	—	—	(636)
Currency translation gains/losses	(269)	20	—	—	(173)	(422)
31 December 2016	16,859	2,736	23,464	—	7,642	50,701
Additions to provision	5,362	1,066	3,458	2,000	2,361	14,247
Utilisation	(16,752)	(1,897)	(12,900)	—	(1,777)	(33,326)
Release of provisions	(3,126)	—	(1,071)	—	(71)	(4,268)
Reclassifications from/(to) current	(433)	—	669	—	—	236
Currency translation gains/losses	1,650	322	3,191	—	(937)	4,226
Discontinued operations	—	(751)	—	—	(2,355)	(3,106)
31 December 2017	$ 3,560	$ 1,476	$ 16,811	$ 2,000	$ 4,863	$ 28,710

The changes in the carrying value of non-current provisions during the year are indicated below (in thousands):

	Contingent Consideration[1]	Uncertain Tax Positions Reserve	Product Remediation	Restructuring Reserve	Other Reserves	Total
31 December 2015	$ 3,457	$ 13,048	$ —	$ —	$ 480	$ 16,985
Additions to provision	2,553	4,024	10,024	—	1	16,602
Utilisation	(2,087)	—	—	—	(140)	(2,227)
Release of provisions	—	—	—	—	(90)	(90)
Currency translation gains/losses	(33)	(215)	(1)	—	(14)	(263)
31 December 2016	3,890	16,857	10,023	—	237	31,007
Acquisition of Caisson Interventional LLC	31,688	—	—	—	—	31,688
Additions to provision	65	(79)	—	—	138	124
Utilisation	(1,907)	—	—	—	—	(1,907)
Release of provisions	—	—	—	(41)	(172)	(213)
Reclassifications from/(to) non-current	—	—	(669)	433	—	(236)
Currency translation gains/losses	237	1,528	1,381	—	28	3,174
Discontinued operations	—	—	—	—	(231)	(231)
31 December 2017	$ 33,973	$ 18,306	$ 10,735	$ 392	$ —	$ 63,406

(1) The contingent consideration liability represents contingent payments related to three acquisitions: the first and second acquisitions, in September 2015, were Cellplex PTY Ltd. in Australia and the commercial activities of a local distributor in Colombia. The contingent payments for the first acquisition are based on achievement of sales targets by the acquiree through 30 June 2018 and the contingent payments for the second acquisition are based on sales of cardiopulmonary disposable products and heart lung machines of the acquiree through December 2019. The third acquisition, Caisson, occurred in May 2017. Refer to "Note 6. Business Combinations."

Note 20. Other Payables

(in thousands)	31 December 2017	31 December 2016
Accrued expenses- employee-related charges	$ 45,616	$ 50,277
Other accrued expenses	24,443	15,516
Amounts due to employees	14,048	20,373
Deferred compensation - Caisson acquisition	14,300	—
Other current liabilities	5,295	6,700
Other amounts due to health and social security institution	6,560	7,652
Deferred income	2,900	1,708
Escrow deposit - Caisson	2,000	—
Current advances from customers	1,199	3,438
Total	$ 116,361	$ 105,664

Note 21. Share-Based Incentive Plans

Share-Based Incentive Plans

On 16 October 2015, we approved the adoption of the Company's 2015 Incentive Award Plan, which was previously approved by the Board of Directors of the Company on 14 September 2015 subject to such shareholder approval. The Plan was adopted in order to facilitate the grant of cash and equity incentives to non-employee directors, employees (including our named executive officers) and consultants of the Company and certain of our affiliates and to enable the Company and certain of our affiliates to obtain and retain services of these individuals. The Plan became effective as of 19 October 2015. Incentive awards may be granted under the 2015 Plan in the form of share options, share appreciation rights, restricted share, restricted share units, other share and cash-based

awards and dividend equivalents. As of 31 December 2017, there were approximately 6,115,000 shares available for future grants under the 2015 Plan.

Share-Based Compensation

Amounts of share-based compensation recognised in the consolidated statements of income (loss), by expense category are as follows (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Cost of sales	$ 770	$ 984
Selling, general and administrative	24,723	22,435
Research and development	1,935	1,266
Expense related to acquisition of Sorin S.p.A. in Oct 2015	—	271
Share-based compensation from continuing operations	27,428	24,956
Stock-based compensation from discontinued operations	1,433	2,376
Total stock-based compensation	$ 28,861	$ 27,332

Amounts of share-based compensation expense recognised in the consolidated statements of income (loss), by type of arrangement are as follows (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Service-based stock appreciation rights	$ 8,537	$ 11,507
Service-based restricted stock units	$ 16,343	$ 13,328
Market performance-based restricted stock units	732	31
Operating performance-based restricted stock units	1,816	90
Total share-based compensation expense	$ 27,428	$ 24,956

The expense for the years ended 31 December 2017 and 31 December 2016 related to awards that were accounted for as equity settled.

Share Options and Share Appreciation Rights

We use the Black-Scholes option pricing methodology to calculate the grant date fair market value of share option awards and share appreciation rights. The following table lists the assumptions we utilized as inputs to the Black-Scholes model:

	Year Ended 31 December 2017	Year Ended 31 December 2016
Weighted average share price	56.84	54.31
Exercise price	56.17–80.26	54.31–65.58
Dividend Yield [(1)]	—	—
Risk-free interest rate - based on grant date [(2)]	1.7% – 2.2%	1.0% – 1.8%
Expected option term - in years per group of employees/consultants [(3)]	4.6 – 5.2	4.0 – 5.0
Expected volatility at grant date [(4)]	29.6% – 30.4%	30.8% – 32.4%

(1) We do not plan to pay dividends.
(2) We use yield rates on U.S. Treasury securities for a period that approximated the expected term of the award to estimate the risk-free interest rate.
(3) We estimated the expected term of the awards granted using historic data of actual time elapsed between the date of grant and the exercise or forfeiture of options or SARs for employees. For consultants, the expected term is the remaining time until expiration of the option or SAR.
(4) Refer to "Note 2. Basis of Preparation, Use of Accounting Estimates and Significant Accounting Policies-Share-based Compensation" for further information regarding expected volatility.

The following tables detail the activity for service-based share option awards and share appreciation rights, including awards assumed or issued as a result of the Mergers:

Options and SARs	Year Ended 31 December 2017 Number of Optioned Shares	Year Ended 31 December 2017 Wtd. Avg. Exercise Price	Year Ended 31 December 2016 Number of Optioned Shares	Year Ended 31 December 2016 Wtd. Avg. Exercise Price
Outstanding – at beginning of year	1,949,328	$ 57.07	1,589,561	$ 55.56
Granted	654,478	$ 56.84	761,812	$ 54.31
Exercised	(345,513)	$ 56.60	(256,293)	$ 37.62
Forfeited	(154,381)	$ 59.52	(81,230)	$ 64.42
Expired	(78,790)	$ 58.90	(64,522)	$ 55.45
Outstanding – end of year	2,025,122	$ 56.82	1,949,328	$ 57.07
Fully vested and exercisable – end of year	944,051	$ 58.37	941,763	$ 55.65
Fully vested and expected to vest – end of year [(1)]	1,990,317	$ 56.82	1,915,212	$ 57.03

(1) Factors in expected future forfeitures.

The weighted average remaining contractual life for the share options and SARs outstanding at 31 December 2017 and 31 December 2016 is 6.80 years and 6.09 years, respectively.

The aggregate intrinsic value of the options and SARs outstanding at 31 December 2017 and 31 December 2016 is $46 million and $2 million, respectively. The aggregate intrinsic value of options and SARs is based on the difference between the fair market value of the underlying share at the end of the period using the market closing share price, and exercise price for in-the-money awards.

The range of exercise prices for options and SARs outstanding year end are categorized in exercise price ranges as follows:

Outstanding Options	31 December 2017	31 December 2016
$10–20	10,251	94,021
$21–30	35,776	90,368
$31–40	4,228	20,481
$41–50	243,277	91,887
$51–60	1,303,080	633,329
$61–70	412,876	659,475
$71–80	15,634	—
Total	2,025,122	1,589,561

	Year Ended 31 December 2017	Year Ended 31 December 2016
Weighted average grant date fair value of share option awards and SARs during the year	$ 17.19	$ 15.03
Weighted average share price of share option exercises during the year	$ 56.60	$ 37.62
Aggregate intrinsic value of share option and SAR exercises during the year (in thousands)	$ 5,462	$ 5,033

Restricted Share and Restricted Share Units Awards

The following tables detail the activity for service-based restricted share and restricted share unit awards, including activity from restricted share units assumed or issued as a result of the Mergers:

	Year Ended 31 December 2017		Year Ended 31 December 2016	
	Number of Shares	Wtd. Avg. Grant Date Fair Value	Number of Shares	Wtd. Avg. Grant Date Fair Value
Non-vested shares at beginning of year	506,219	$ 56.56	203,563	$ 59.20
Granted	131,442	$ 61.37	407,822	$ 55.53
Vested	(169,580)	$ 59.09	(88,303)	$ 56.65
Forfeited	(87,973)	$ 56.68	(16,863)	$ 62.73
Non-vested shares at end of year	380,108	$ 57.07	506,219	$ 56.56

	Year Ended 31 December 2017	Year Ended 31 December 2016
Weighted average grant date fair value of service-based share grants issued during the year	$ 55.53	$ 57.55
Aggregate fair value of service-based share grants that vested during the year (in thousands)	$ 4,810	$ 24,384

The following tables detail the activity for performance-based and market-based restricted share and restricted share unit awards:

	Year Ended 31 December 2017		Year Ended 31 December 2016	
	Number of Shares	Wtd. Avg. Grant Date Fair Value	Number of Shares	Wtd. Avg. Grant Date Fair Value
Non-vested shares at beginning of year	52,083	$ 42.01	—	$ —
Granted	346,584	$ 42.11	52,083	$ 42.01
Vested	(2,171)	$ 57.60	—	$ —
Forfeited	(55,109)	$ 42.73	—	$ —
Non-vested shares at end of year	341,387	$ 41.90	52,083	$ 42.01

	Year Ended 31 December 2017	Year Ended 31 December 2016
Weighted average grant date fair value of performance-based share grants issued during the year	$ 42.11	$ 42.01
Aggregate fair value of performance-based share grants that vested during the year (in thousands)	$ 110	$ —

Note 22. Employee Retirement Plans

We sponsor several defined benefit pension plans, which include plans in the U.S., Italy, Germany, Japan and France. We maintain a frozen cash balance retirement plan in the U.S., that is a contributory, defined benefit plan designed to provide the benefit in terms of a stated account balance dependent on the employer's promised interest-crediting rate. In Italy and France we maintain a severance pay defined benefit plan that obligates the employer to pay a severance payment in case of resignation, dismissal or retirement. In other jurisdictions we sponsor non-contributory, defined benefit plans designated to provide a guaranteed minimum retirement benefits to eligible employees.

We also sponsor defined contribution plans, including the Cyberonics, Inc. Employee Retirement Savings Plan, which qualifies under Section 401(k) of the IRC, covering U.S. employees, the Cyberonics, Inc. Non-Qualified Deferred Compensation Plan, covering certain U.S. middle and senior management and the Belgium Defined Contribution Pension Plan for Cyberonics's Belgium employees.

The expense related to these plans was $10.2 million and $11.6 million for the years ended 31 December 2017 and 31 December 2016, respectively.

As at 31 December 2017 the net underfunded status of our U.S. and non-U.S. defined benefit pension plans was $22.6 million.

Risks Related to Defined-benefit Plans

The defined benefit plans expose the Company to various demographic and economic risks such as longevity risk, investment risks, currency and interest rate risk and in some cases inflation risk. The latter plays a role in the assumed wage increase and in some smaller plans where indexation is mandatory. Pension fund Trustees are responsible for and have full discretion over the investment strategy of the plan assets. In general Trustees manage pension fund risks by diversifying the investments of plan assets and by (partially) matching interest rate risk of liabilities.

The Company has an active de-risking strategy in which it constantly looks for opportunities to reduce the risks associated with its defined benefit plans. The plans are governed by Trustees who have a legal obligation to evenly balance the interests of all stakeholders and operate under the local regulatory framework.

The change in benefit obligations and funded status of our U.S. and non-U.S. pension benefits are as follows (in thousands):

	Year Ended 31 December 2017		Year Ended 31 December 2016	
	U.S. Pension Benefits	Non-U.S. Pension Benefits	U.S. Pension Benefits	Non-U.S. Pension Benefits
Accumulated benefit obligation at end of year	$ 11,191	$ 23,785	$ 10,615	$ 39,002
Change in projected benefit obligation				
Projected benefit obligation at beginning of year	$ 10,425	$ 20,402	$ 10,218	$ 29,315
Service cost	—	503	—	693
Interest cost	361	291	367	534
Plan curtailments and settlements	—	—	(609)	(296)
Actuarial (gain) loss	770	(27)	698	1,227
Benefits paid	(555)	(2,222)	(249)	(2,214)
Foreign currency exchange rate changes and other	—	2,601	—	(682)
Projected benefit obligation at end of year	$ 11,001	$ 21,548	$ 10,425	$ 28,577
Change in plan assets				
Fair value of plan assets at beginning of year	$ 5,925	$ 2,898	$ 5,858	$ 2,760
Actual return on plan assets	444	54	277	29
Employer contributions	870	—	—	—
Employee contributions	—	369	648	369
Plan settlements	—	—	(609)	—
Benefits paid	(360)	(393)	(249)	(244)
Foreign currency exchange rate changes	—	147	—	63
Fair value of plan assets at end of year	6,879	3,075	5,925	2,977
Funded status at end of year				
Fair value of plan assets	6,879	3,075	5,925	2,977
Benefit obligations	11,001	21,548	10,425	28,577
Underfunded status of the plans	4,122	18,473	4,500	25,600
Recognised liability	4,122	18,473	4,500	25,600
Amounts recognised on the consolidated balance sheets consist of				
Non-current	4,122	18,473	4,500	25,600
Recognised liability	$ 4,122	$ 18,473	$ 4,500	$ 25,600

Major actuarial assumptions used in determining the benefit obligations and net periodic benefit (income) cost for our significant benefit plans are presented in the following table as weighted averages:

	Year Ended 31 December 2017		Year Ended 31 December 2016	
	U.S. Pension Benefits	Non-U.S. Pension Benefits	U.S. Pension Benefits	Non-U.S. Pension Benefits
Actuarial assumptions used to determine benefit obligation				
Discount rate	3.28%	0.27% – 2.73%	3.63%	0.27% – 1.50%
Rate of compensation increase	N/A	2.50% – 3.00%	N/A	2.50% – 3.89%
Actuarial assumptions used to determine net periodic benefit cost				
Discount rate	3.63%	0.27% – 2.73%	3.64% – 3.79%	0.27% – 1.50%
Rate of compensation increase	N/A	2.50% – 3.00%	N/A	2.50% – 3.89%
Expected return on plan assets	5.00%	N/A	5%	N/A

To determine the discount rates for our U.S. benefit plan, we used the Citigroup Above-median yield curve. For the discount rates used to determine the other non-U.S. benefit plans we consider local market expectations of long-term returns. The resulting discount rates are consistent with the duration of plan liabilities.

The expected long-term rate of return on plan assets assumptions are determined using a building block approach, considering historical averages and real returns of each asset class. In certain countries, where historical returns are not meaningful, consideration is given to local market expectations of long-term returns.

Retirement Benefit Plan Investment Strategy

In the U.S., we have an account that holds the defined benefit frozen balance pension plan assets. The Qualified Plan Committee sets investment guidelines for U.S. pension plans with the assistance of an external consultant. The plan assets in the U.S. are invested in accordance with sound investment practices that emphasize long-term fundamentals. The investment objectives for the plan assets in the U.S. are to achieve a positive rate of return that would be expected to close the current funding deficit and so enable us to terminate the frozen pension plan at a reasonable cost. These guidelines are established based on market conditions, risk tolerance, funding requirements and expected benefit payments. The Plan Committee also oversees the investment allocation process, selects the investment managers, and monitors asset performance. The investment portfolio contains a diversified portfolio of fixed income and equity index funds. Securities are also diversified in terms of domestic and international securities, short- and long-term securities, growth and value styles, large cap and small cap stocks.

Outside the U.S., pension plan assets are typically managed by decentralized fiduciary committees. There is a significant variation in policy asset allocation from country to country. Local regulations, local funding rules, and local financial and tax considerations are part of the funding and investment allocation process in each country. Pension plan assets outside of the U.S. were $3.1 million as of 31 December 2017 and were not material.

Our U.S. pension plan target allocations as of 31 December 2017, by asset category, are as follows:

	U.S. Pension Benefits
Equity Securities	27%
Debt Securities	63%
Other	10%
Total	100%

Retirement Benefit Fair Values

The following is a description of the valuation methodologies used for retirement benefit plan assets measured at fair value:

Equity Mutual Funds: Valued based on the year-end net asset values of the investment vehicles. The net asset values of the investment vehicles are based on the fair values of the underlying investments of the partnerships valued at the closing price reported in the

active markets in which the individual security is traded. Equity mutual funds have a daily reported net asset value and we classify these investments as Level 2.

Fixed Income Mutual Funds: Valued based on the year-end net asset values of the investment vehicles. The net asset values of the investment vehicles are based on the fair values of the underlying investments of the partnerships valued based on inputs other than quoted prices that are observable.

Money Markets: Valued based on quoted prices in active markets for identical assets.

The following tables provide information by level for the retirement benefit plan assets that are measured at fair value, as defined by IFRS. Refer to "Note 2. Basis of Preparation, Use of Accounting Estimates and Significant Accounting Policies" for discussion of the fair value measurement terms of Levels 1, 2, and 3.

(in thousands)	Fair Value as at 31 December 2017	Fair Value Measurement Using Inputs Considered as		
		Level 1	Level 2	Level 3
Equity mutual funds	$ 1,879	$ —	$ 1,879	$ —
Fixed income mutual funds	4,334	—	4,334	—
Money market funds	666	666	—	—
Total	$ 6,879	$ 666	$ 6,213	$ —

(in thousands)	Fair Value as at 31 December 2016	Fair Value Measurement Using Inputs Considered as		
		Level 1	Level 2	Level 3
Equity mutual funds	$ 1,660	$ —	$ 1,660	$ —
Fixed income mutual funds	4,041	—	4,041	—
Money market funds	224	224	—	—
Total	$ 5,925	$ 224	$ 5,701	$ —

Retirement Benefit Funding Plan

We have the policy to make the minimum required contribution to fund the U.S. pension plan as determined by MAP – 21 and the Highway and Transportation Funding Act of 2014.

During the year ended 31 December 2017, we did not make a material contribution to the non-U.S. pension plans. The weighted average duration of the defined benefit plans is 13 years and about 10 years for U.S. plans and Non-U.S. plans respectively. We anticipate that we will make contributions to the U.S. pension plan of approximately $0.9 million during fiscal year 2018. Contributions to the non-U.S. pension plans in fiscal year 2017 are not expected to be material.

Benefit payments, including amounts to be paid from our assets, and reflecting expected future service, as appropriate, are expected to be paid as follows:

(in thousands)	U.S. Plan	Non-U.S. Plans
2018	$ 1,965	$ 1,670
2019	622	801
2020	1,034	1,019
2021	780	911
2022	1,033	1,085
Thereafter	5,757	16,062

Sensitivity Analysis

The sensitivity of the defined benefit obligation as of 31 December 2017 to significant changes in actuarial assumptions:

	Increase +0.50%	Decrease –0.50%
Discount rate	(1.01)%	5.31%

The above sensitivity analysis is based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method (present value of the defined benefit obligation calculated with the projected until credit method at the end of the reporting period) has been applied as when calculating the defined benefit liability recognised in the consolidated balance sheets.

Defined Contribution Plans. We incurred expenses for our defined contribution plans of $7.8 million and $10.0 million for the years ended 31 December 2017 and 31 December 2016, respectively.

Severance Indemnity. In Italy, upon termination of employment for any reason, employers are required to pay a TFR to all employees as required by Italian legislation. The TFR serves as a backup in the event of redundancy or as an additional pension benefit after retirement. The TFR is considered a defined contribution plan with respect to amounts vesting after 1 January 2007 for employees who have opted for a supplementary pensions system or who have chosen to maintain the TFR at the company, for companies with more than 50 employees. A similar termination indemnity is required in France. In France the Indemnités de Fin de Carrière consists in a termination indemnity which must be paid by the employer to an employee in case of retirement, based on a number of monthly gross salary depending by seniority, type of contract and employee level. We have incurred expenses related to the Italian TFR and France severance indemnity of approximately $0.4 million and $1.1 million, respectively, for the years ended 31 December 2017 and 31 December 2016, respectively.

Note 23. Income Taxes

Income tax benefit (expense) consists of the following (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Current tax	$ (40,128)	$ 36,668
Deferred tax	50,113	(114,794)
Income tax benefit (expense)	$ 9,985	$ (78,126)

The following is a reconciliation of the statutory income tax rate to our effective income tax rate expressed as a percentage of income before income taxes:

	Year Ended 31 December 2017	Year Ended 31 December 2016
Statutory tax rate at U.K. Rate	19.0 %	20.0 %
Effect of changes in tax rate	(27.5)	10.7
Change in unrecognized deferred tax assets	13.4	(13.7)
Reduced tax benefit due to non-deductible transaction costs	2.5	(51.0)
U.S. state and local tax provision, net of federal benefit	1.6	(39.3)
Foreign tax rate differential	14.9	(503.9)
Notional interest deduction	(17.0)	340.5
U.S. Subpart F	1.8	(39.1)
Research and development tax credits	(2.1)	20.0
Equity compensation	—	—
Reserve for uncertain tax positions	1.5	(41.4)
Domestic manufacturing deduction	(2.2)	13.9
Sale of intellectual property	0.2	(1,558.3)
Distribution of subsidiary earnings	(0.4)	274.5
Revaluation of investment in subsidiaries	(15.3)	69.8
Other, net	(0.8)	(18.2)
Effective tax rate	(10.4)%	(1,515.5)%

U.S. Tax Reform

On 22 December 2017, the U.S. enacted the Tax Cuts and Jobs 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. We recorded no toll charge for the year ended 31 December 2017 as we had no previously deferred foreign earnings of U.S. controlled foreign subsidiaries as of the measurement dates. As a result of the Act, we recorded a non-cash net benefit of $16.0 million during the fourth quarter of 2017, which is included in "Income tax (benefit) expense" in the consolidated statements of (loss) income. This amount primarily consists of two components: (i) $12.8 million relating to de-recognition of foreign tax credits, and (ii) a net benefit of $28.8 million resulting from the remeasurement of our deferred tax assets and liabilities in the U.S. based on a change in the corporate income tax rate.

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 net benefit of $16.0 million is a reasonable estimate of the impact of the income tax effects of the Act on us as of 31 December 2017, 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.

Deferred Income Tax Assets and Liabilities

The change in net deferred tax (liabilities) assets, inclusive of discontinued operations, as recognized in the balance sheet can be analysed as follows (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
At the beginning of the year	$ (82,550)	$ (49,396)
Deferred tax income (expense) for the period, net	63,261	(34,220)
Deferred tax recorded in equity[(1)]	3,913	2,021
Currency translation and other	(6,412)	(955)
At the end of the year	$ (21,788)	$ (82,550)

(1) The $3.9 million reduction in deferred tax liability offset to equity was primarily due to excess tax benefit from stock-based compensation and adjustments relating to the Caisson acquisition purchase price accounting and revaluation of our investment in ImThera.

Deferred income tax assets and liabilities, inclusive of discontinued operations, on a gross basis are summarised as follows (in thousands):

	31 December 2017	31 December 2016
Deferred tax assets		
Net operating loss carryforwards (NOLs)	$ 52,475	$ 74,043
Tax credit carryforwards	5,343	17,242
Deferred compensation	28,521	1,805
Accruals and reserves	27,409	28,988
Depreciation and amortization	76,026	85,201
Inventory	16,524	17,174
Investments	3,858	—
Other	3,366	8,856
Total deferred tax assets	213,522	233,309
Deferred tax liabilities		
Gain on sale of intellectual property	(75,624)	(136,117)
Investments	(4,917)	(12,553)
Property, equipment & intangible assets	(153,588)	(165,998)
Other	(1,181)	(1,191)
Gross deferred tax liabilities	(235,310)	(315,859)
Total deferred tax liabilities, net	$ (21,788)	$ (82,550)
Reported in the consolidated balance sheet as (after jurisdictional netting)		
Net deferred tax asset	$ 80,983	$ 86,053
Deferred tax liability	(102,771)	168,603
Total deferred tax liabilities, net	$ (21,788)	$ (82,550)

We remeasured certain deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future. However, we are still analyzing certain aspects of the Act and refining our calculations, which could potentially affect the measurement of these balances or potentially give rise to new deferred tax amounts.

We utilized $2.5 million and $5.3 million of U.S. capital loss carryforward for the years ended 31 December 2017 and 31 December 2016, respectively. We have $12.8 million of unrecognized foreign tax credits in the U.S., $3.4 million of U.S. State tax credits and $2.4 million of other credits.

Net Operating Loss Carryforwards

We had the following net operating loss carryforwards as of 31 December 2017, including discontinued operation NOLs, which can be used to reduce our income tax payable in future years (in thousands):

Region	Gross Amount	Gross Amount with No Expiration	With Expiration	Starting Expiration Year
Europe	$ 335,855	$ 324,279	$ 11,576	2022
South America	14,815	14,815	—	N/A
U.S. Federal	134,415	—	134,415	2021
U.S. State	106,555	—	106,555	2018
Far East	12,174	—	12,174	2018

Included in the table above are gross deferred tax assets that have not been recognized with respect of the following items (in thousands):

	31 December 2017	31 December 2016
Tax loss carryforwards[(1)]	$ 274,638	$ 218,058
Other[(2)]	13,241	—
Total	$ 287,879	$ 218,058

(1) Included in tax loss carryforwards for the year ended 31 December 2017 were unrecognized gross deferred tax assets of $182.5 million related to discontinued operations. The tax loss carryforwards represent tax benefits that were not recorded due to the inability to utilize the carryforwards.

(2) Other deferred tax assets for which tax benefits were not recorded refers primarily to U.S. foreign tax credits and U.S. alternative minimum tax credits.

The historic NOLs of Sorin U.S., obtained in the acquisition of Sorin S.p.A. on 19 October 2015, are limited by U.S. Internal Revenue Code Section 382. The limitation on the utilization of NOL is approximately $14.2 million per year, which is expected to be sufficient to absorb the U.S. net operating losses prior to their expiration.

A significant portion of our worldwide net deferred tax liability relates to the tax effect of the step-up in value of the assets acquired with the acquisition of Sorin S.p.A. on 19 October 2015.

No provision has been made for income taxes on undistributed earnings of foreign subsidiaries as of 31 December 2017 because it is our intention to indefinitely reinvest undistributed earnings of our foreign subsidiaries. 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. There should be no material tax liability on future distributions as most jurisdictions with undistributed earnings have various participation exemptions / no withholding tax. As of 31 December 2017, it was not practicable to determine the amount of the deferred income tax liability related to those investments.

Uncertain Tax Positions

Tax authorities may disagree with certain positions we have taken and assess additional taxes. We regularly assess the likely outcomes of our tax positions in order to determine the appropriateness of our reserves for uncertain tax positions. However, there can be no assurance that we will accurately predict the outcome of these audits and the actual outcome of an audit could have a material impact on our consolidated results of income, financial position or cash flows. If all of our unrecognized tax benefits as of 31 December 2017 were recognized, $22.8 million would impact our effective tax rate. We are unable to estimate the amount of change in the majority of our unrecognized tax benefits over the next 12 months. Refer to “Note 24. Commitments and Contingencies” for additional information regarding the status of current tax litigation.

Accrued interest and penalties related to uncertain tax positions totalled $8.0 million and $6.3 million as of 31 December 2017 and 31 December 2016, respectively, and were included in non-current provisions on our consolidated balance sheets.

On 26 October 2017, the European Commission announced that an investigation will be opened with respect to the UK's controlled foreign company 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 for this matter and we are unable to reasonably estimate the potential liability for this matter. 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.

Other Matters

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.

The major jurisdictions where we are subject to income tax examinations are as follows:

Jurisdiction	Earliest year open
U.S. - federal and state	1992
Italy	2012
Germany	2010
England and Wales	2013
Canada	2013

In April 2016, the IRS and U.S. Treasury Department issued new rules that materially change the manner in which the determination is made as to whether the U.S. anti-inversion rules under Section 7874 will apply. The new rules have the effect of linking with the acquisition of Sorin S.p.A. in 2015 certain future acquisitions of U.S. businesses made in exchange for LivaNova equity, and such linkage may impact LivaNova's ability to engage in particular acquisition strategies. For example, the new temporary regulations would impact certain acquisitions of U.S. companies in an exchange for stock in LivaNova during the 36 month period beginning 19 October 2015 by excluding from the Section 7874 calculations the portion of shares of LivaNova that are allocable to the legacy Cyberonics shareholders. This new rule would generally have the effect of increasing the otherwise applicable Section 7874 fraction with respect to future acquisitions of a U.S. business, thereby increasing the risk that such acquisition could cause LivaNova to be treated as a U.S. corporation for U.S. federal income tax purposes.

On 13 October 2016, the IRS and U.S. Treasury Department released final and temporary regulations under section 385. In response to comments, the final regulations significantly narrow the scope of the proposed regulations previously issued on 4 April 2016. Like the proposed regulations, the final regulations establish extensive documentation requirements that must be satisfied for a debt instrument to constitute debt for U.S. federal tax purposes and re-characterizes a debt instrument as stock if the instrument is issued in one of a number of specified transactions. Moreover, while these new rules are not retroactive, they will impact our future intercompany transactions and our ability to engage in future restructuring.

Executive Order 13789, issued in April 2017, ordered the US Treasury to examine tax regulations for excessive cost, complexity or whether such regulation exceeded IRS's statutory authority, which included IRC Sec. 385.

Note 24. Commitments and Contingencies

FDA Warning Letter

On 29 December 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 24 August 2015 to 27 August 2015 and the Arvada facility from 24 August 2015 to 1 September 2015. On 27 August 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 Heater-Cooler 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 13 October 2016, the CDC and FDA separately released safety notifications regarding the 3T devices. The CDC's Morbidity and Mortality Weekly Report and Health Advisory Notice 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 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 18 August 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 13 October 2016, in response to the Warning Letter and CDC's HAN and FDA's Safety Commission, 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 for 3T device users who have reported confirmed M. chimaera mycobacterium contamination. Although the deep disinfection service

is not yet available in the U.S., it is currently offered in many countries around the world and will be expanded to additional geographies as we receive the required regulatory approvals.

On 31 December 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 31 December 2017, the product remediation liability was $27.5 million. Refer to "Note 19. Provisions" for additional information.

Litigation

The Company is currently involved in litigation involving our 3T heater-cooler product. 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 27 February 2018, we are involved in approximately 110 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 31 May 2017, the Company received a Civil Investigative Demand 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. was created as a result of a spin-off from SNIA S.p.A. 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 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 1 April 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 28 July 2015, Sorin received an administrative 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, 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 28 July 2015, the Public Administrations filed an opposition proceeding to the merger between Sorin and Cyberonics, 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 30 October 2009, the Regional Internal Revenue Office of Lombardy informed Sorin Group Italia S.r.l. that, among several issues, it was disallowing in part (for a total of €102.6 million (approximately $123.0 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 3 February 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 $75.1 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 $20.4 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 (loss) income, financial position or liquidity.

Lease Agreements

We have operating leases for facilities and equipment. Rent expense from all operating leases amounted to approximately $18.8 million and $15.6 million for the years ended 31 December 2017 and 31 December 2016, respectively.

The future minimum lease payments for operating leases related to continuing operations as of 31 December 2017 are (in thousands):

No later than 1 year	$	13,584
Later than 1 year and no later than 5 years		34,115
Later than 5 years		24,632

Note 25. Earnings Per Share

Basic EPS is calculated by dividing the profit for the year attributable to owners of the parent by the weighted average number of Ordinary Shares outstanding during the year. Diluted EPS is calculated by dividing the net profit attributable to attributable to owners of the parent by the weighted average number of Ordinary Shares outstanding during the year plus the weighted average number of Ordinary Shares that would be issued on conversion of all the dilutive potential Ordinary Shares into Ordinary Shares.

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

	Year Ended 31 December 2017	Year Ended 31 December 2016
Numerator		
Net income (loss) from continuing operations	$ 106,396	$ (83,281)
Net loss from discontinued operations	(32,330)	(111,325)
Income (loss) attributable to owners of the parent	$ 74,066	$ (194,606)
Denominator		
Basic weighted average shares outstanding	48,157	48,860
Add effects of stock-based compensation instruments[(1)]	344	154
Diluted weighted average shares outstanding.	48,501	49,014
Basic income (loss) per share		
Continuing operations	$ 2.21	$ (1.70)
Discontinued operations	(0.67)	(2.28)
	$ 1.54	$ (3.98)
Diluted income (loss) per share		
Continuing operations	$ 2.19	$ (1.70)
Discontinued operations	(0.66)	(2.27)
	$ 1.53	$ (3.97)

(1) Excluded from the computation of diluted earnings per share for the year ended 31 December 2017 were stock options, SARs and restricted share units outstanding at 31 December 2017 to purchase 24 thousand shares because to include them would have been anti-dilutive. Excluded from the computation of diluted earnings per share for the year ended 31 December 2016 were stock options, SARs and restricted share units outstanding at 31 December 2016 to purchase 1.6 million shares because to include them would have been anti-dilutive.

Note 26. Geographic and Segment Information

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.

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

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, amortization and litigation settlement.

Net sales and operating income (loss) by segment are as follows (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Net sales		
Cardiac Surgery	$ 635,517	$ 611,715
Neuromodulation	374,976	351,406
Other	1,784	1,737
Total net sales	$ 1,012,277	$ 964,858

	Year Ended 31 December 2017	Year Ended 31 December 2016
Operating profit (loss) before exceptional items		
Cardiac Surgery	$ 49,107	$ (15,331)
Neuromodulation	187,309	173,684
Other	(116,170)	(81,297)
Total Operating profit before exceptional items	120,246	77,056
Exceptional items	32,584	57,754
Operating income from continuing operations	$ 87,662	$ 19,302

The following tables present capital expenditures by reportable segment (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Capital expenditures		
Cardiac Surgery	$ 18,985	$ 21,190
Neuromodulation	2,504	8,098
Other	7,010	5,265
Discontinued operations	5,608	3,809
Total	$ 34,107	$ 38,362

Revenue of our reportable segments include end-customer revenues from the sale of products they each develop and manufacture or distribute. The segment income represents operating income before merger, integration and restructuring expenses. This measurement is included in the reporting package for the Chief Operating Decision Maker, and used by the CODM in evaluating performance and allocating resources.

The segment's assets included in management evaluations are those used by the segment in the performance of its ordinary activities, or those assets that may be reasonably allocated to the segment as a function of its ordinary activities. These include the following financial statement items: property, plant and equipment; intangible assets; goodwill; investments in associates measured at net equity; investments in other companies; and inventories.

Geographic Information

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

Net sales to external customers by geography are determined based on the country the products are shipped from and are as follows (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
United States	$ 494,724	$ 480,558
Europe[(1)(2)]	210,470	204,846
Rest of world	307,083	279,454
Total[(3)]	$ 1,012,277	$ 964,858

(1) Net sales to external customers includes $30.8 million and $37.3 million in the United Kingdom, our country of domicile, for the years ended 31 December 2017 and 31 December 2016, respectively. Prior to the Mergers, we were domiciled in the United States.

(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.

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

	31 December 2017	31 December 2016
United States	$ 53,570	$ 58,679
Europe	113,536	116,385
Rest of world	10,883	31,465
Total	$ 177,989	$ 206,529

Note 27. Related Parties

Interests in subsidiaries are set out in "Note 11. Investments in Associates, Joint Ventures and Subsidiaries". Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

In the normal course of business the Company issues loans, purchases and sells goods and services from or to various related parties in which the Company typically holds a 50% or less equity interest and has significant influence. These transactions are generally conducted with terms comparable to transactions with third parties.

Prior to the Mergers the Company did not carry any transactions with related parties. The following receivable balances arose from sale and financing transactions with associates (in thousands):

Balance Sheet	31 December 2017	31 December 2016
Financial assets - non-current		
Caisson Interventional LLC[(1)]	$ —	$ 1,870
ImThera Medical, Inc.[(2)]	1,000	—
Total	$ 1,000	$ 1,870
Trade receivables - current		
Microport Sorin	$ 945	$ 209
Cardiosolutions Inc	—	10
Total	$ 945	$ 219
Other financial assets - current		
Highlife SAS	$ —	$ 6,852
Respicardia, Inc.	417	0
Total	$ 417	$ 6,852

(1) On 2 May 2017, we acquired the remaining 51% equity interests in Caisson. Refer to “Note 6. Business Combinations” for further information.
(2) On 16 January 2018, we acquired the remaining 86% outstanding interests in ImThera. Refer to "Note 33. Events after the Reporting Period" for further information.

The following sales and financing transactions were entered into with associates during the periods as follows (in thousands):

Income Statement	Year Ended 31 December 2017	Year Ended 31 December 2016
Revenue		
Microport Sorin	$ 2,785	$ 1,704
Financial income		
Highlife SAS	$ —	$ 157

Total compensation in respect of key management, who are defined as the Board of Directors and certain members of senior management, is considered to be a related party transaction.

The total compensation in respect of key management was as follows (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Salaries and short term benefits	$ 7,365	$ 8,890
Post-employment benefits	496	454
Termination benefits	1,483	2,066
Share-based compensation	8,211	15,967
Total	$ 17,555	$ 27,377

There were no other material related party transactions in the period.

Note 28. Consolidated Statements of Income (Loss) - Expenses by Nature

(in thousands)	Year Ended 31 December 2017	Year Ended 31 December 2016
Net sales	$ 1,012,277	$ 964,858
Other revenues and income	4,995	8,429
Cost of materials, service used and change in inventory	(419,229)	(409,707)
Personnel expense	(402,891)	(372,578)
Other operating costs	(25,328)	(36,500)
Amortisation, depreciation and impairment	(72,069)	(79,115)
Additions to provisions	(10,093)	(56,085)
Gain on acquisition of Caisson Interventional, LLC	39,428	—
Impairment of cost-method investments	(8,565)	—
Interest expense	(7,797)	(10,616)
Interest income	1,318	1,698
Foreign exchange	1,084	3,140
Share of loss from equity method investments	(16,719)	(18,679)
Income (loss) from continuing operations before tax	96,411	(5,155)
Income tax (benefit)/expense	(9,985)	78,126
Loss from discontinued operations	(32,330)	(111,325)
Income (loss) attributable to owners of the parent	$ 74,066	$ (194,606)

Note 29. Employee and Key Management Compensation Costs

(in thousands)	Year Ended 31 December 2017	Year Ended 31 December 2016
Wages and salaries	$ 311,322	$ 285,991
Share-based payments[(1)]	27,428	24,956
Other employee costs	64,141	61,631
Total	$ 402,891	$ 372,578

(1) Represents share-based payments included in personnel expense. Refer to Note 21. “Share-Based Incentive Plans” for total share-based compensation expense.

Details of directors’ remuneration are included in pages 53 to 66 of the Directors’ Remuneration Report, which forms part of these financial statements.

Employee numbers

The average monthly employee numbers on a full-time equivalent basis, excluding employees of associated and joint venture undertakings and including executive directors was 4,500 for the year ended 31 December 2017, including approximately 900 employed by our CRM business franchise as of 31 December 2017, and 4,674 for the year ended 31 December 2016.

Note 30. Exceptional Items

The following exceptional items are included within operating loss (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Merger and integration expenses	$ 15,528	$ 20,377
Restructuring expenses	17,056	37,377
Total	$ 32,584	$ 57,754

Merger Expenses. Merger expenses consisted of expenses directly related to the Mergers, such as professional fees for legal services, accounting services, due diligence, as well as investment banking fees. Refer to "Note 6. Business Combinations" for more details.

Integration Expenses. Integration expenses consisted primarily of consultation with regard to our systems integration, organization structure integration, finance, synergy and tax planning, the transition to U.S. GAAP for Sorin activity and certain re-branding efforts.

Restructuring Expenses. After the consummation of the Mergers between Cyberonics with Sorin in October 2015, we initiated several restructuring plans to combine our business operations. We identify costs incurred and liabilities assumed for the restructuring plans. The restructuring plans are intended to leverage economies of scale, eliminate duplicate corporate expenses, streamline distributions and logistics and office functions in order to reduce overall costs.

Note 31. Auditors' Remuneration

(in thousands)	Year Ended 31 December 2017	Year Ended 31 December 2016
LivaNova auditors		
Fees payable to the Company's auditor and its associates for the audit of parent company and consolidated financial statements	$ 2,237	$ 2,617
Fees payable to the Company's auditor and its associates for other services		
The audit of the Company's subsidiaries	1,874	1,725
Total audit fees payable to the Company's auditor	4,111	4,342
Audit-related services	765	—
Taxation compliance services	50	29
Taxation advisory services	—	—
Other non-audit services	633	543
Total fees payable to the Company's auditor	$ 5,559	$ 4,914

Note 32. New Accounting Pronouncements

The standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Company's financial statements are disclosed below. The Company intends to adopt these standards, if applicable, when they become effective.

IFRS 9, Financial Instruments. IFRS 9 was issued in May 2014 and is effective for years beginning on or after January 1, 2018. The standard replaces the majority of IAS 39, Financial instruments; recognition and impairment, and covers the classification, measurement and de-recognition of financial assets and financial liabilities, introduces a new impairment model for financial assets based on expected losses rather than incurred losses and provides a new hedge accounting model.

IFRS 9 includes a single approach for the classification of financial assets, based on the business model used to manage financial assets in order to generate cash flows and the cash flow characteristics of those financial assets. A financial asset held at amortised cost must be managed under a business model where financial assets are held to collect contractual cash flows and have cash flows which relate solely to payments of principal and interest. A financial asset held under a business model under which financial assets may be either held to collect contractual cash flows or sold will be classified as held at fair value through Other Comprehensive

Income if the SPPI criteria are met. Any other financial assets will be held at fair value through profit or loss or Other Comprehensive Income as appropriate. At inception, an entity at its sole option may irrevocably designate an investment in an equity instrument to be held at fair through Other Comprehensive Income unless the asset is deemed held for trading or contingent consideration. We did not make this election and therefore, all financial assets will be held at fair value through profit or loss. As such, we estimate a transition adjustment to be recorded to retained earnings in the amount of $5.5 million related to our investment in ImThera at 1 January 2018.

IFRS 9 also introduces the expected credit loss model for impairment of financial assets which replaces the incurred loss model used in IAS 39. Application of the IFRS 9 impairment model is not expected to have a significant impact given the Company's current credit risk management policies.

Finally, IFRS 9 introduces changes related to hedging by allowing more exposures to be hedged and establishing new criteria for hedge accounting that are less complex and more aligned with the way that entities manage risks when compared to IAS 39. Application of the changes to hedging under IFRS 9 are not expected to have a significant impact to the Company's financial statements.

IFRS 15 Revenue from Contracts with Customers. IFRS 15 was issued in May 2014 and establishes a five-step model to account for revenue arising from contracts with customers. IFRS 15 requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers and replaces most existing revenue recognition guidance. We adopted the new revenue guidance on January 1, 2018. We elected the modified retrospective 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 will not change. Upon adoption of the new standard, 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 analysed.

IFRS 16 Leases. In January 2016, the IASB issued final accounting guidance on leases which provides a new model for lease accounting in which all leases, other than short-term and small-ticket-item leases, will be accounted for by the recognition on the balance sheet of a right-to-use asset and a lease liability, and the subsequent amortization of the right-to-use asset over the lease term. IFRS 16 will be effective for annual periods beginning on or after 1 January 2019. Early application is permitted, provided the new revenue standard, IFRS 15 Revenue from Contracts with Customers, has been applied, or is applied at the same date as IFRS 16. The Company is evaluating the effect this standard will have on its financial statements and related disclosures.

There are no other standards and interpretations in issue but not yet adopted that the management anticipate will have a material effect on the reported income or net assets of the Company.

Note 33. Events after the Reporting Period

ImThera Acquisition

On 16 January 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 based on achieving regulatory and sales milestones. 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. The ImThera device is aligned with our Neuromodulation business franchise. ImThera has a commercial presence in the European market, and we will be advancing ImThera's enrolment in an FDA pivotal study.

TandemLife Acquisition

On 4 April 2018, we announced the closing of our acquisition of CardiacAssist, Inc., dba TandemLife, a privately-held Delaware corporation. TandemLife designs, manufactures and commercializes advanced cardiac and respiratory temporary support solutions. We agreed to pay up to $250 million to acquire TandemLife, with upfront costs of approximately $200 million and with up to $50 million in contingent consideration based on achieving regulatory milestones.

Bridge Facility Agreement

On 3 April 2018, in connection with the TandemLife acquisition, we drew down $190.0 million under a a term loan bridge facility agreement at an interest rate of 2.63%. The Bridge Facility Agreement will terminate on 14 August 2018, but may be extended to 13 February 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.

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.

The proceeds of the Bridge Facility are intended to be used to fund the acquisition and pay related expenses, refinance certain indebtedness and for general corporate and working capital purposes.

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LIVANOVA PLC
COMPANY STATEMENT OF (LOSS) INCOME
(In thousands)

	Note	Year Ended 31 December 2017	Year Ended 31 December 2016
Revenue	16	$ 23,630	$ 15,915
Net operating expenses		(65,703)	(56,515)
Operating loss before exceptional items		(42,073)	(40,600)
Exceptional items	18	(101,675)	(45,510)
Operating loss		(143,748)	(86,110)
Income from subsidiary undertakings		55,121	270,474
Interest income		3,372	1,867
Interest expense		(15,327)	(9,540)
Foreign exchange		(455)	(17,304)
(Loss) income before tax		(101,037)	159,387
Income tax benefit (expense)	13	4,355	(2,023)
(Loss) income for the period		$ (96,682)	$ 157,364

LIVANOVA PLC
COMPANY STATEMENT OF COMPREHENSIVE INCOME
(In thousands)

	Note	Year Ended 31 December 2017	Year Ended 31 December 2016
(Loss) income for the period		$ (96,682)	$ 157,364
Items of other comprehensive income (loss) that will subsequently be reclassified under profit:			
Cash flow hedges for interest rate fluctuations	8	(939)	543
Tax impact		402	(296)
Foreign currency translation differences		59,367	606
Total items of other comprehensive income that will subsequently be reclassified under profit.		58,830	853
Items of other comprehensive income (loss) that will not subsequently be reclassified under profit:			
Remeasurements of net assets for defined benefits	13	(6)	(6)
Tax impact		—	1
Total items of other comprehensive (loss) income that will not subsequently be reclassified under profit		(6)	(5)
Total other comprehensive income, net of taxes		58,824	848
Total comprehensive income for the period, net of taxes		$ (37,858)	$ 158,212

LIVANOVA PLC
COMPANY BALANCE SHEET
(In thousands)

	Note	31 December 2017	31 December 2016
ASSETS			
Non-current Assets			
Property, plant and equipment	3	$ 1,167	$ 1,127
Intangible assets	4	1,027	1,034
Investments in subsidiaries	5	3,172,721	3,195,829
Deferred tax assets	13	13,615	1,514
Other assets		18,767	15,094
Total non-current Assets		3,207,297	3,214,598
Trade receivables	7	5,447	14,345
Other receivables		4,132	6,652
Financial derivative assets	8	941	8,269
Other financial assets	6	321,649	250,172
Tax assets		8,866	8,789
Cash and cash equivalents		76,065	25,832
Total current assets		417,100	314,059
Total assets		$ 3,624,397	$ 3,528,657
LIABILITIES AND EQUITY			
Equity			
Share capital	9	$ 74,750	$ 74,578
Merger relief reserve	9	66,446	66,446
Share premium	9	14,485	9,684
Capital reduction reserve	9	1,257	1,257
Treasury shares	9	(133)	(4,500)
Accumulated other comprehensive income (loss)	9	37,085	(21,739)
Retained earnings		2,613,939	2,690,870
Total equity		$ 2,807,829	$ 2,816,596
Non-current liabilities			
Financial derivative liabilities	8	$ 1,294	$ 1,392
Financial liabilities	10	184,177	172,458
Provision for employee severance indemnities and other employee benefit provisions		1,274	1,017
Deferred tax liabilities	13	—	38
Total non-current liabilities		186,745	174,905
Current liabilities			
Trade payables		15,210	12,905
Other payables	11	13,805	10,673
Provisions		—	1,180
Financial derivative liabilities	8	751	942
Other financial liabilities	10	598,219	503,313
Tax payable		1,838	8,143
Total current liabilities		629,823	537,156
Total liabilities and equity		$ 3,624,397	$ 3,528,657

Registration number 09451374

The financial statements on pages 151 to 180 were approved by the Board of Directors and were signed on its behalf on

26 April 2018 by:

DAMIEN MCDONALD

CHIEF EXECUTIVE OFFICER & DIRECTOR

LIVANOVA PLC
COMPANY STATEMENT OF CHANGES IN EQUITY
(In thousands)

	Note	Ordinary Shares Number of Shares	Share Capital	Merger Relief Reserve	Share Premium	Capital Reduction Reserve	Treasury Shares	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Deficit)	Total Equity
Balance at 31 December 2015		48,868	$ 75,444	$ 2,649,592	$ 1,673	$ —	$ —	$ (22,587)	$ (22,614)	$ 2,681,508
Capital Restructuring	9	—	—	(2,583,146)	—	—	—	—	2,583,146	—
Share repurchases	9	(993)	(1,257)	—	—	1,257	(4,500)	—	(49,987)	(54,487)
Share-based compensation plans	12	282	391	—	8,011	—	—	—	22,961	31,363
Total transactions with owners, recognised directly in shareholders' equity		(711)	(866)	(2,583,146)	8,011	1,257	(4,500)	—	2,556,120	(23,124)
Income for the period		—	—		—	—	—	—	157,364	157,364
Other comprehensive income	9	—	—	—	—	—	—	848	—	848
Total comprehensive income for the period		—	—	—	—	—	—	848	157,364	158,212
Balance at 31 December 2016		48,157	74,578	66,446	9,684	1,257	(4,500)	(21,739)	2,690,870	2,816,596
Capital Restructuring	9	—	—	—	—	—	—	—	—	—
Share repurchases	9	—	—	—	—	—	—	—	—	—
Share-based compensation plans	12	133	172	—	4,801		4,367	—	19,751	29,091
Total transactions with owners, recognised directly in shareholders' equity		133	172	—	4,801	—	4,367	—	19,751	29,091
Income for the period		—	—		—	—	—	—	(96,682)	(96,682)
Other comprehensive income	9	—	—	—	—	—	—	58,824	—	58,824
Total comprehensive income for the period		—	—	—	—	—	—	58,824	(96,682)	(37,858)
Balance at 31 December 2017		48,290	$ 74,750	$ 66,446	$ 14,485	$ 1,257	$ (133)	$ 37,085	$ 2,613,939	$ 2,807,829

Note 1. Nature of Operations

Company information. LivaNova PLC is a public limited company incorporated in the United Kingdom under the Companies Act 2006 (Registration number 09451374). The Company is domiciled in the United Kingdom and its registered address is 20 Eastbourne Terrace, London, W2 6LG, United Kingdom.

Background. LivaNova was incorporated in England and Wales on 20 February 2015 for the purpose of facilitating the business combination of Cyberonics, Inc., a Delaware corporation and Sorin S.p.A., a joint stock company organized under the laws of Italy. As a result of the business combination, LivaNova became the holding company of the combined businesses of Cyberonics and Sorin. This business combination became effective on 19 October 2015, at which time LivaNova's Ordinary Shares were listed for trading on the Nasdaq and on the London Stock Exchange as a standard listing under the trading symbol "LIVN". On 23 February 2017, we announced our voluntary cancellation of our standard listing of Ordinary Shares with the London Stock Exchange due to the low volume of our ordinary share trading on the London Stock Exchange. Trading ceased at the close of business on 4 April 2017.We continue to serve our shareholders through our listing on the Nasdaq.

The principal legislation under which LivaNova operates is the Companies Act 2006, and regulations made thereunder. The LivaNova Shares were admitted to listing on the Official List pursuant to Chapter 14 of the Listing Rules, which sets out the requirements for standard listings. LivaNova complies with Listing Principles 1 and 2 as set out in Chapter 7 of the Listing Rules, as required by the Financial Conduct Authority.

As part of the Mergers Sorin undertook a cross-border legal entity merger with LivaNova (the "Sorin merger") under which LivaNova was the surviving ultimate holding company. The Company elected to apply predecessor accounting to this common control business combination and as a result of the Sorin merger the assets and liabilities of Sorin were transferred to LivaNova and recorded in the Company's books using the predecessor book values in the amount of $903.0 million as at the date of the transfer. All shares of Sorin were cancelled and LivaNova issued 22,673 thousand shares to the Sorin shareholders. As a result of the Sorin merger a merger relief reserve was recorded in the amount of $867.9 million.

Immediately following the Sorin merger, each issued and outstanding Cyberonics common shares was converted into LivaNova Ordinary Shares. As a result of the share conversion, LivaNova issued 26,046 thousand shares to the Cyberonics shareholders in exchange for Cyberonics shares. The investment in Cyberonics was recorded at cost, being the fair value of consideration transferred which is calculated by reference to the fair value of Cyberonics's closing share price of $69.95 per share on 16 October 2015, the last business day prior to the date of the share exchange. As a result of the share exchange transaction the Company recognised a merger reserve in the amount of $1,781.7 million, equal to the difference between the fair value of the increase in the investment carrying value and the aggregate nominal value of the shares issued. Since the shares issued by LivaNova as part of the Cyberonics merger were issued with nominal value equal to fair value on that basis the shares were not issued at a premium, therefore, no share premium was recognised.

In respect of both of these share issues, the Company took merger relief in line with the Companies Act 2006 and recognised a merger relief reserve instead of share premium.

Description of the business. LivaNova is 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.

Note 2. Basis of Preparation, Use of Accounting Estimates and Significant Accounting Policies

Basis of Preparation. The separate financial statements of LivaNova have been prepared on a going concern basis under the historical cost convention, except for derivative financial instruments and share based payments awards that have been measured at fair value in accordance with the Companies Act 2006. The financial statements are presented in U.S. dollars and all values are rounded to the nearest thousands, except when otherwise indicated.

The financial statements of LivaNova have been prepared in accordance with Financial Reporting Standard 101 'Reduced Disclosure Framework'. The change in basis of preparation has enabled LivaNova to take advantage of the applicable disclosure exemptions permitted by FRS 101 in the financial statements, which are summarised below:

Standard Disclosure	Exemption
IFRS 7, 'Financial Instruments: Disclosures'	Full exemption
IFRS 13, 'Fair Value Measurement'	paras 91-99 – disclosure of valuation techniques and inputs used for fair value measurement of assets and liabilities
IAS 7, 'Statement of Cash Flows'	Full exemption
IAS 8, 'Accounting Policies, Changes in Accounting Estimates and Errors'	paras 30-31 – disclosure in respect of new standards and interpretations that have been issued but which are not yet effective
IAS 24, 'Related Party Disclosures'	para 17 – key management compensation
	The requirements to disclose related party transactions entered into between two or more members of a group, provided that any subsidiary which is a party to the transaction is wholly owned by such a member

Fiscal Year-End. The periods presented include the years ended 31 December 2017 and 31 December 2016.

New Accounting Pronouncements, Refer to "Note 32. New Accounting Pronouncements" to the consolidated financial statements in this 2017 Annual Report.

Investments. Investments in subsidiaries, associates and joint ventures are accounted for at cost less any provision for impairment.

Foreign currencies. The U.S. dollar is the functional currency of the Company and presentation currency of LivaNova separate financial statements. Foreign currency transactions are translated into functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions, and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies, are recognised in the statement of (loss) income except when deferred in other comprehensive income (loss) as qualifying cash flow hedges.

Foreign currency differences arising from translation are recognised in the income statement, except for available-for-sale equity investments which are recognised in other comprehensive income (loss), unless regarding an impairment in which case foreign currency differences that have been recognised in other comprehensive income (loss) are reclassified to the income statement.

The GBP exchange rate to the USD used in preparing the Company financial statements was as follows:

	Weighted Average Rate GBP	Closing Rate GBP
Year Ended 31 December 2017	0.776928	0.739730
Year Ended 31 December 2016	0.741130	0.812240

All exchange differences are presented as part of "Foreign exchange" on the statement of (loss) income.

Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial assets and financial liabilities are offset with the net amount reported in the statement of financial position only if there is a current enforceable legal right to offset the recognised amounts and an intent to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

(a) *Financial assets*

Initial recognition and measurement. Financial assets are classified, at initial recognition, as financial assets at fair value through profit or loss, loans and receivables, held-to-maturity investments, available-for-sale (AFS) financial assets, or as derivatives

designated as hedging instruments in an effective hedge, as appropriate. The Company determines the classification of its financial assets at initial recognition. All financial assets are recognised initially at fair value plus, in the case of assets not at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognised on the trade date, i.e., the date on which the Company commits to purchase or sell the asset.

Impairment of financial assets. The Company assesses, at each reporting date, whether there is any objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that has occurred since the initial recognition of the asset (an incurred 'loss event'), has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that the debtors, or a group of debtors, is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

The subsequent measurement and impairment of financial assets depends on their classification as described below:

Financial assets at fair value through profit or loss. Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held-for trading if they are acquired for the purpose of selling or repurchasing in the near term. This category includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by IAS 39. We use freestanding derivative forward contracts to offset exposure to the variability of the value associated with assets and liabilities denominated in a foreign currency. These derivatives are not designated as hedges; therefore, changes in the value of these forward contracts are recognised in the income statement, thereby offsetting the current net income (loss) effect of the related change in value of foreign currency denominated assets and liabilities. The Company has not designated any financial assets as at fair value through profit or loss.

Loans and receivables. Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortised cost using the EIR method, less impairment. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit or loss. The receivables balance consists of trade receivables from subsidiaries and third party customers. We maintain an allowance for doubtful accounts for potential credit losses based on our estimates of the ability of customers to make required payments, historical credit experience, existing economic conditions and expected future trends. We write off uncollectible accounts against the allowance when all reasonable collection efforts have been exhausted. Loans, together with the associated allowance, are written off when there is no realistic prospect of future recovery and all collateral has been realised or has been transferred to the Company. The losses arising from impairment are recognised in the statement of income or loss in net operating expenses. Refer to "Note 7. Trade Receivables and Allowance for Bad Debt" for further information.

Available-for-sale financial investments. AFS financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. The Company does not have financial instruments classified as AFS.

Derecognition. A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is derecognised when:

- The rights to receive cash flows from the asset have expired, or

- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through arrangement, and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and, to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset nor transferred control of it, the asset is recognised to the extent of its continuing

involvement in it. In that case, the Company also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Company could be required to repay.

(b) *Financial liabilities*

Initial recognition and measurement. Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings (bank debt), payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs. The Company's financial liabilities include trade and other payables, loans and bank debt including bank overdrafts, and derivative financial instruments.

The measurement of financial liabilities depends on their classification, as follows:

Financial liabilities at fair value through profit or loss. Financial liabilities at fair value through profit or loss include financial liabilities held-for-trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held-for-trading if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by IAS 39. Gains or losses on liabilities held-for-trading are recognised in the statement of income or loss. Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IAS 39 are satisfied. The Company has not designated any financial liabilities as at fair value through profit or loss.

Loans and borrowings (bank debt). After initial recognition, interest bearing loans and borrowings are subsequently measured at amortised cost using the effective interest rate method. Gains and losses are recognised in the statement of income or loss when the liabilities are derecognised as well as through the EIR method amortisation process. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in the statement of profit or loss.

Financial guarantee contracts. Financial guarantee contracts issued by the Company are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. Financial guarantee contracts are recognised initially as a liability at fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequently, the liability is measured at the higher of the best estimate of the expenditure required to settle the present obligation at the reporting date and the amount recognised less cumulative amortisation.

Derecognition. A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of income or loss.

Derivative financial instruments and hedge accounting. We use currency exchange rate derivative contracts and interest rate derivative instruments, to manage the impact of currency exchange and interest rate changes on income statement and cash flows. Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. 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 income statement. Cash flows from derivative contracts are reported as operating activities in the statements of cash flows.

When a hedging instrument expires or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecast transaction is ultimately

recognised in profit or loss. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately reclassified to profit or loss.

In order to minimize income statement and cash flow volatility resulting from currency exchange rate changes, we enter into derivative instruments, principally forward currency exchange rate contracts. These contracts are designed to hedge anticipated foreign currency transactions and changes in the value of specific assets and liabilities and of some revenue. At inception of the forward contract, the derivative is designated as either a freestanding derivative or a cash flow hedge. For derivative instruments that are designated and qualify as a cash flow hedge, the effective portion of the gain or loss on the derivative instrument is reported as a component of accumulated other comprehensive income (loss) and reclassed into income statement to offset exchange differences originated by the hedged item or to adjust the value of operating income (expense). We do not enter into currency exchange rate derivative contracts for speculative purposes.

We use interest rate derivative instruments designated as cash flow hedges to manage the exposure to interest rate movements and to reduce the risk of increase of borrowing costs by converting floating-rate debt into fixed-rate debt. Under these agreements, we agree to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to agreed-upon notional principal amounts. The interest rate swaps are structured to mirror the payment terms of the underlying loan. The fair value of the interest rate swaps is reported in the balance sheets financial assets or liabilities (current or non-current) depending upon the gain or loss position of the contract and the maturity of the future cash flows of the fair value of each contract. The effective portion of the gain or loss on these derivatives is reported as a component of accumulated other comprehensive income (loss). The non-effective portion is reported in interest expense in income statement.

Cash and Cash Equivalents. Cash and cash equivalents include all cash balances highly liquid investments with an original maturity of three months or less, which approximate their fair value.

Borrowing costs. General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use or sale. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation. Other borrowing costs are expensed in the period in which they are incurred.

Property, Plant and Equipment. PP&E is carried at cost, less accumulated depreciation and any accumulated impairment losses. Maintenance and repairs, and minor replacements are charged to expense as incurred, while significant renewals and improvements are capitalised. We compute depreciation using the straight-line method over estimated useful lives. Where an item of PP&E comprises several parts with different useful lives, each part is recognised as a separate item and depreciated over its useful life. Useful life and residual value of PP&E are reviewed at each period-end. As necessary, the occurrence of changes to the useful life or residual value is recognised prospectively as a change in accounting estimates.

Leasehold improvements are depreciated over the shorter of the useful life of an asset or the lease term. Capital improvements to the building are added as building components and depreciated over the useful life of the improvement or the building, whichever is less.

The estimated useful lives for our depreciable PP&E as of 31 December 2017 are as follow:

	Lives in Years
Building and building improvements	up to 10
Equipment, furniture, fixtures	up to 8

Where there are any internal or external indications that the value of an item of PP&E may be impaired, the recoverable amount of the group of CGUs to which it belongs is calculated. If the recoverable amount is less than the carrying amount of the group of CGUs, a provision for impairment is recorded. PP&E is reviewed for impairment annually on 1st of October.

Intangible Assets. Intangible assets shown on the balance sheet are finite-lived assets that are carried at cost less accumulated amortisation. We amortise our intangible assets over their useful lives using the straight-line method. We evaluate our intangible

assets each reporting period to determine whether events and circumstances indicate either a different useful life or impairment. If we change our estimate of the useful life of an asset, we amortize the carrying amount over the revised remaining useful life.

Impairment of Intangible Assets. The Company assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's CGU's fair value less costs of disposal and its value in use. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Revenue. Revenue largely consists of intercompany re-charges, services and management fees. Revenue is measured at the fair value of the consideration received or receivable. The Company recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and specific criteria have been met.

Defined Benefit Pension Plans and Other Post-Employment Benefits. The Company sponsors various retirement benefit plans, including defined benefit pension plans (pension benefits), defined contribution savings plans and termination indemnity plans. The cost of providing benefits under the defined benefit plans is determined separately for each plan using the projected unit credit method.

Re-measurements, comprising of actuarial gains and losses, the effect of the asset ceiling (excluding amounts included in net interest on the net defined benefit liability) and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the balance sheet with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Re-measurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognised in profit or loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date on which the Company recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Company recognises the following changes in the net defined benefit obligation under 'Net operating expenses' in the statement of (loss) income:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements
- Net interest expense or income

Provision for TFR is mandatory for Italian companies and is considered:

- a defined benefit plan with respect to amounts vested up to 31 December 2006 and amounts vesting as from 1 January 2007 for employees who have chosen to maintain the TFR at the company, for companies with 50 or fewer employees;
- a defined contribution plan with respect to amounts vesting as from 1 January 2007 for employees who have opted for supplementary pensions or who have chosen to maintain the TFR at the company, for companies with more than 50 employees.

As a defined benefit plan, the TFR is measured using the unit credit projection method based on actuarial assumptions (financial assumptions: discount rate, benefit growth rate). The increase in the present value of the TFR is included in net operating expenses, with the exception of the revaluation of the net liability, which is recorded among items of other comprehensive income. The cost of TFR accrued up to 31 December 2006 no longer includes a component related to future salary increases. Payments of TFR, as a defined contribution plan, are also included in personnel expense, and until they are settled financially, they have a balancing entry in the statement of financial position in the form of current payables.

Share-Based Compensation

We grant share-based incentive awards to directors, officers, key employees and consultants during each fiscal year. We measure the cost of employee services received in exchange for an award of equity instruments based on the grant date fair market value of the award. The cost of equity-settled transactions is recognised in employee benefits expense, together with a corresponding increase in equity over the period in which the service and the performance conditions are fulfilled (the vesting period). The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Company's best estimate of the number of equity instruments that will ultimately vest. We issue new shares upon share option exercise, SAR exercise, the award of restricted share and at our election, on vesting of a restricted share unit. The social security contributions on employee share-based payment awards are accrued over the service period.

The following share-based incentive awards are offered by the Company:

- *Share Appreciation Rights.* A SAR confers upon an employee the contractual right to receive an amount of cash, share, or a combination of both that equals the appreciation in the Company's common share from an award's grant date to the exercise date. SARs may be exercised at the employee's discretion during the exercise period and do not give the employee an ownership right in the underlying share. The SARs may be settled in LivaNova shares and/or cash, as determined by LivaNova and as set forth in the individual award agreements. SARs do not involve payment of an exercise price. We use the Black-Scholes option pricing methodology to calculate the grant date fair market value of SARs. We determine the expected volatility on historical volatility.

- *Restricted Share and Restricted Share Units.* We grant restricted share and restricted share units at no purchase cost to the grantee, which typically vest over four years or cliff-vest in one or three years. Unvested restricted share entitles the grantees to dividends, if any, and voting rights for their respective shares. Sale or transfer of the share and share units are restricted until they are vested. We issue new shares for our restricted share and restricted share unit awards. We have the right to elect to pay the cash value of vested restricted share units in lieu of the issuance of new shares. Under our share-based compensation plans we repurchase a portion of these shares from our employees to permit our employees to meet their minimum statutory tax withholding requirements on vesting of their restricted share.

- *Service-Based Restricted Share and Restricted Share Units.* The fair market value of service-based restricted share and restricted share units are determined using the market closing price on the grant date, and compensation is expensed ratably over the vesting period. Calculation of compensation for restricted share awards requires estimation of employee turnover and forfeiture rates.

- *Market and Performance-Based Restricted Share and Performance-Based Restricted Share Units.* We may grant restricted share and restricted share units subject to market or performance conditions that vest based on the satisfaction of the conditions of the award. The fair market values of market condition-based awards are determined using the Monte Carlo simulation method. The Monte Carlo simulation method is subject to variability as several factors utilised must be estimated, including the derived service period, which is estimated based on our judgement of likely future performance and our share price volatility. The fair value of performance-based awards is determined using the market closing price on the grant date. Derived service periods and the periods charged with compensation expense for performance-based awards are estimated based on our judgement of likely future performance and may be adjusted in future periods depending on actual performance.

Income Taxes. The tax expense for the period comprises current and deferred tax. Current and deferred tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period. Management establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred taxes are recognised by the liability method for temporary differences between the carrying amount of assets and liabilities in the balance sheet and their tax base. They are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date. Adjustments to deferred taxes resulting from changes in tax rates are recognised in profit or loss. However, when the deferred tax relates to items recognised in equity, the adjustment is also recognised in equity. A deferred tax asset is recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. At each period-end, the Company reviews the recoverable value of deferred tax assets of tax entities holding significant loss carryforwards. This value is based on the strategy for recoverability of the tax loss carryforwards. Deferred taxes are charged or credited directly to equity when the tax relates to items that are recognised directly in equity, such as gains and losses on cash flow hedges and actuarial gains and losses on defined benefit plan obligations. Deferred tax assets and liabilities are set off when they are levied by the same taxation authority and the entity has a legally enforceable right of set off. Deferred taxes are recognised for all temporary differences associated with investments in subsidiaries and associates, except to the extent that the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax balances are not discounted.

Leases. We account for leases that transfer substantially all benefits and risks incident to the ownership of property as an acquisition of an asset and the incurrence of an obligation, and we account for all other leases as operating leases. Certain of our leases provide for tenant improvement allowances that have been recorded as deferred rent and amortized, using the straight-line method, over the life of the lease as a reduction to rent expense. In addition, scheduled rent increases and rent holidays are recognised on a straight-line basis over the term of the lease.

Equity. Ordinary Shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Contingencies. The Company is subject to product liability claims, government investigations and other legal proceedings in the ordinary course of business. Legal fees and other expenses related to litigation are expensed as incurred and included in Selling, general and administrative expenses in the statement of (loss) income. Contingent accruals are recorded when the Company determines that a loss is both probable and reasonably estimable. Due to the fact that legal proceedings and other contingencies are inherently unpredictable, our assessments involve significant judgement regarding future events.

Critical Estimates and Judgements. The preparation of our financial statements in conformity with FRS101 requires management to make estimates and judgements that affect the amounts reported in such financial statements and accompanying notes. These estimates and judgements are based on management's best knowledge of current events and actions we may undertake in the future. Actual results could differ materially from those estimates. Application of the following accounting policies requires certain judgements and estimates that have the potential for the most significant impact on our financial statements:

- *Investments in Subsidiaries.* We review investments in subsidiaries for impairment when events or changes in circumstances indicate that a potential impairment exists, which involves estimation of future cash flows relating to each investment. See "Note 5. Investments in Subsidiaries" for more details.

- *Commitments and Contingencies.* Refer to "Note 2. Basis of Preparation, Use of Accounting Estimates and Significant Accounting Policies" of the consolidated financial statements.

Note 3. Property, Plant and Equipment

(in thousands)	Building and Building Improvements	Equipment, Furniture & Fixtures	Total
At 31 December 2016			
Gross amount	$ 1,062	$ 2,955	$ 4,017
Accumulated depreciation and impairment	(143)	(2,747)	(2,890)
Net amount	$ 919	$ 208	$ 1,127
At 31 December 2017			
Gross amount	$ 1,190	$ 3,401	$ 4,591
Accumulated depreciation and impairment	(218)	(3,206)	(3,424)
Net amount	$ 972	$ 195	$ 1,167

Changes during the year in the net amount of each category of property, plant and equipment are indicated below (in thousands):

	Building and Building Improvements	Equipment, Furniture & Fixtures	Total
Net amount at 31 December 2015	$ 199	$ 235	$ 434
Additions	799	49	848
Depreciation	(78)	(70)	(148)
Currency translation losses	(1)	(6)	(7)
Net Amount at 31 December 2016	919	208	1,127
Additions	117	76	193
Depreciation	(63)	(89)	(152)
Currency translation losses	(2)	1	(1)
Net Amount at 31 December 2017	$ 971	$ 196	$ 1,167

Note 4. Intangible Assets

(in thousands)	Patents	Trademarks and Trade Names	Software and Other	Total
At 31 December 2016				
Gross amount	$ 7,019	$ 1,196	$ 5,645	$ 13,860
Accumulated amortisation and impairment	(7,019)	(1,196)	(4,611)	(12,826)
Net amount	$ —	$ —	$ 1,034	$ 1,034
At 31 December 2017				
Gross amount	$ 7,986	$ 1,361	$ 6,899	$ 16,246
Accumulated amortisation and impairment	(7,986)	(1,361)	(5,872)	(15,219)
Net amount	$ —	$ —	$ 1,027	$ 1,027

The changes in the net carrying value of each class of intangible assets during the year are indicated below (in thousands):

	Trademarks and Trade Names	Software and Other	Total
Net amount at 31 December 2015	$ 29	$ 1,057	$ 1,086
Additions	—	507	507
Amortisation	(29)	(539)	(568)
Currency translation losses	—	9	9
Net Amount at 31 December 2016	—	1,034	1,034
Additions	—	462	462
Amortisation	—	(586)	(586)
Currency translation gains	—	117	117
Net Amount at 31 December 2017	$ —	$ 1,027	$ 1,027

Amortisation costs charged to the statement of (loss) income totalled $0.6 million for both years ended 31 December 2017 and 31 December 2016 and was recorded within net operating expenses.

The amortisation periods for our finite-lived intangible assets as of 31 December 2017 and 31 December 2016:

	Minimum Life in Years	Maximum Life in Years
Trademarks and trade names	4	4
Software	3	5

Note 5. Investments in Subsidiaries

(in thousands)	Cost
Net amount at 31 December 2015	$ 3,476,708
Distribution of reserves	(222,904)
Capital conferral	212
Impairment	(35,510)
Currency translation	(22,677)
Net Amount at 31 December 2016	3,195,829
Additions	23,234
Sale of investment (6.93%)	(30,814)
Capital conferral	59
Impairment	(89,069)
Currency translation	73,482
Net Amount at 31 December 2017	$ 3,172,721

(in thousands)	31 December 2017	31 December 2016
Gross amount	$ 3,297,300	$ 3,231,339
Accumulated impairment	(124,579)	(35,510)
Net book value	$ 3,172,721	$ 3,195,829

During the year ended 31 December 2017, LivaNova PLC sold 6.93% of its interest in LivaNova UK Holdco Limited to LivaNova UK Limited. The consolidated group ownership of UK Holdco Limited remained at 100%.

We review for impairment when events or changes in circumstances indicate that a potential impairment exists. Impairments of $44.9 million and $72.3 million related to the CRM franchise were recorded at the LivaNova consolidated group in the years ended 31 December 2017 and 31 December 2016. For further information, refer to "Note 7. Discontinued Operations" and “Note 10. Goodwill and Intangible Assets” of LivaNova PLC and Subsidiaries consolidated financial statements. As a result of the impairments recorded at the LivaNova consolidated group level, we reviewed the fair value of our investments in subsidiaries and determined that impairments of $89.1 million and $35.5 million were necessary for the years ended 31 December 2017 and 31 December 2016, respectively.

The detail of investments in subsidiary undertakings as at 31 December 2017 is shown as follows (in thousands, except ownership percent):

	% Ownership	31 December 2017	31 December 2016
Sorin CRM SAS	100.00	$ 139,862	$ 228,931
Livanova Switzerland SA	100.00	6,312	6,312
LivaNova Nederland NV	100.00	61,287	61,287
Sorin Group USA Inc.	100.00	886,268	886,268
LivaNova Canada Corp.	100.00	111,013	111,013
Livn UK Holdco Limited.	42.07	187,064	217,878
Livn US 1, LLC	100.00	147,330	147,330
Livn Luxco Sarl	100.00	3,000	3,000
Livn Irishco 1 UC.	100.00	1,000,271	1,000,212
Cyberonics Holdings LLC	100.00	23,141	—
Cyberonics Netherlands CV	99.00	93	—
Sorin Group Italia S.r.l.	90.37	587,671	516,538
LivaNova Site Management S.r.l.	86.42	19,409	17,060
		$ 3,172,721	$ 3,195,829

The Company had the following directly and indirectly owned subsidiaries and associates as of 31 December 2017:

	Registered Office	Functional Currency	% Consolidated Group Ownership	Name	% Ownership
LivaNova PLC (Italian Branch)	Via Benigno Crespi 17 20159 Milan, Italy	EUR	100		
Caisson Interventional LLC	10900 73rd Ave N Ste 116, Maple Grove, MN 55339 USA	USD	49	LivaNova USA Inc.	100
Cardiosolutions Inc.	375 West Street, West Bridgewater, MA 02379 USA	USD	35	Sorin Group USA Inc.	35
Cyberonics Holdings LLC	100 Cyberonics Boulevard, Houston, TX 77058 USA	USD	100	Cyberonics Inc	100
Cyberonics Latam SRL	Edificio B49, 51 Ave O, Zona Franca Coyo, Coyo-Alajeuela, Costa Rica 20113	CRC	100	Cyberonics Spain S.L.	100
Cyberonics Netherlands CV	100 Cyberonics Boulevard, Houston, TX 77058 USA	EUR	100	LivaNova Plc	99
Cyberonics Spain SL	100 Cyberonics Boulevard, Houston, TX 77058 USA	EUR	100	Cyberonics Netherlands C.V.	100
Enopace Biomedical Ltd	15 Alon Hatavor St, Caesaria 38900 Israel	USD	32	Sorin CRM SAS	34
ImThera Medical, Inc.	12555 High Bluff Dr, Ste 310, San Diego, CA 92130 USA	USD	16	Cyberonics Inc	16
La Bouscarre S.C.I.	Route de Revel 31450 Fourquevaux France	EUR	50	LivaNova France SAS	50
LivaNova Australia PTY Limited	16-18 Hydrive Close - Dandenong South - Victoria 3175, Australia	AUD	100	LivaNova Nederland NV	100

	Registered Office	Functional Currency	% Consolidated Group Ownership	Name	% Ownership
LivaNova Austria GmbH	Donau City Strasse 11/16 1220 Wien, Austria	EUR	100	LivaNova Nederland NV	100
LivaNova Belgium NV	Ikaroslaan 83, 1930 Zaventem, Belgium	EUR	100	LivaNova Nederland NV	100
Livanova Brasil Comércio e Distribuição de Equipamentos Médico-hospitalares Ltda	Rua Liege, 54 – Vila Vermelha, 04298-070 – São Paulo - SP - Brasil	BRL	100	Sorin Group Italia Srl	100
LivaNova Canada Corp.	280 Hillmount Road, Unit 8, Markham, ON L6C 3A1 Canada	CAD	100	LivaNova PLC	100
LivaNova Colombia Sas	Avenida Calle 80 No. 69-70 Bodega 37, Bogotá, Colombia	COP	100	Sorin Group Italia S.r.l.	100
LivaNova Deutschland GmbH	Lindberghstrasse 25, D - 80939 München, Germany	EUR	100	Sorin Group Italia S.r.l.	100
LivaNova Espana, S.L.	Avenida Diagonal 123, planta 10, 08005, Barcelona, Spain	EUR	100	LivaNova Nederland NV	57
LivaNova Finland OY	c/o Kalliolaw Asianajotoimisto Oy, Södra kajen 12, 00130 Helsinki, Finland	EUR	100	Sorin Group Italia S.r.l.	100
LivaNova France SAS	4 avenue Reaumur 92134 Clamart, France	EUR	100	Sorin CRM SAS	100
LivaNova Holding S.r.l.	Via Benigno Crespi, 17 - 20159 Milano, Italy	EUR	100	Sorin Group Italia S.r.l.	100
LivaNova Holding SAS	4 avenue Reaumur 92134 Clamart, France	EUR	100	Sorin CRM SAS	100
LivaNova Holding USA Inc.	14401 W. 65th Way - Arvada, CO 80004 USA	USD	100	LivaNova PLC	100
LivaNova Inc.	1570 Sunland LN, Costa Mesa, CA 92626 USA	USD	100	LivaNova USA Inc.	100
LivaNova India Private Limited	Barakhamba Road 110001 New Delhi, India	INR	100	LivaNova Nederland NV	100
LivaNova IP Limited	20 Eastbourne Terrace, London, England W2 6LG, United Kingdom	EUR	100	LivaNova PLC	100
LivaNova Japan K.K.	11-1 Nagatacho 2 chome, Chiyoda-ku, Tokyo, 100-6110 Japan	JPY	100	LivaNova Nederland NV	100
LivaNova Nederland N.V.	Westerdoksdijk 423, 1013 BX, Amsterdam, Netherlands	EUR	100	LivaNova PLC	100
LivaNova Norway AS	c/o AmestoAccounthouse AS, Smeltedigelen 1, 0195 Oslo, Norway	NOK	100	LivaNova Scandinavia AB	100
LivaNova Poland Sp. Z o.o.	Park Postepu Bud A Ul. Postepu 21 PL-02 676 Warszawa, Poland	PLN	100	LivaNova Nederland NV	100
LivaNova Portugal, Lda	Edificio Zenith, Rua Dr. António L. Borges n. 9/9 a - 6a - Miraflores - 1495-131 Algés, Portugal	EUR	100	Sorin CRM SAS	100
LivaNova Scandinavia AB	Djupdalsvägen 16, 192 51 Sollentuna, Scandinavia	EUR	100	Sorin Group Italia S.r.l.	100
LivaNova Singapore Pte Ltd	The Adelphi, 1 Coleman Street, #10-07, Singapore 179803	SGD	100	Sorin Group Italia S.r.l.	100
LivaNova Site Management S.r.l.	Via Benigno Crespi 17 20159 Milan, Italy	EUR	100	LivaNova Plc Sorin Group Italia S.r.l.	86 14
LivaNova Switzerland SA	WTC Av. Grattapaille 2 1018 Lausanne CH, Switzerland	EUR	100	LivaNova PLC	100
LivaNova UK Limited	1370 Montpellier Court, Gloucester Business Park, Gloucester, Gloucestershire, GL3 4AH, United Kingdom	EUR	100	LivaNova Nederland NV	100
LivaNova USA Inc.	100 Cyberonics Boulevard, Houston, TX 77058 USA	USD	100	LIVN US Holdco LTD	100

	Registered Office	Functional Currency	% Consolidated Group Ownership	Name	% Ownership
Livn Irishco 2 UC	70 Sir John Rogerson's Quay, Dublin 2, Ireland	EUR	100	LIVN UK Holdco LTD	100
Livn Irishco 3 Unlimited Company	70 Sir John Rogerson's Quay, Dublin 2, Ireland	EUR	100	LivaNova PLC	100
Livn Irishco Unlimited Company	70 Sir John Rogerson's Quay, Dublin 2, Ireland	EUR	100	LivaNova PLC	100
Livn Luxco 2 Sarl	15 Rue Edward Steichen L-2540 Luxembourg	EUR	100	LIVN UK Holdco LTD	100
Livn Luxco Sarl	15 Rue Edward Steichen L-2540 Luxembourg	EUR	100	LivaNova PLC	100
Livn UK 2 Co Limited	20 Eastbourne Terrace, London, England W2 6LG, United Kingdom	EUR	100	LIVN US 1 LLC	100
Livn UK 3 Co Limited	20 Eastbourne Terrace, London, England W2 6LG, United Kingdom	EUR	100	LIVN US LP	100
Livn UK Holdco Limited	20 Eastbourne Terrace, London, England W2 6LG, United Kingdom	EUR	100	LIVN UK 2 CO Limited LivaNova Plc LivaNova UK Limited	51 42 7
Livn US 1, LLC	2711 Centerville Road, Suite 400, Wilmington, DE 19808	USD	100	LivaNova PLC	100
Livn US 3 LLC	2711 Centerville Road, Suite 400, Wilmington, DE 19808 USA	USD	100	Sorin Group USA Inc.	100
Livn US Holdco, Inc.	1209 Orange Street, Wilmington, DE 19801 USA	USD	100	LIVN US Lp LIVN UK 3 Co Limited	56 44
Livn US Lp	2711 Centerville Road, Suite 400, Wilmington, DE 19808 USA	USD	100	Livn US Lp Livn US 3 LLC.	83 17
MicroPort Sorin CRM (Shanghai) Co. Ltd	Room 101 Bleg 2 501 Newtone Rd 201203 Shanghaî, China	CNY	49	LivaNova Holding SAS	49
MicroPort CRM Srl	Saluggia (Vercelli) - Italy, via Crescentino snc	EUR	100	Sorin Group Italia Srl	100
Sobedia Energia	Via Crescentino sn 13040 Saluggia (VC), Italy	EUR	75	LivaNova Site Mgmt S.r.l. Sorin Group Italia Srl	25 50
Sorin CRM SAS	4 avenue Reaumur 92134 Clamart, France	EUR	100	LivaNova Plc	100
Sorin Group Czech Republic	Na poriçi 1079/3a Nové Mesto Praha 110 00 Praha 1, Czech Republic	EUR	100	Sorin Group Italia S.r.l.	100
Sorin Group DR, S.r.l.	Edificio I-3Zona Franca Industrial de las Americas, Autopista Las Americas Km 22 Z.F. Santo Domingo Este, Dominican Republic	USD	100	Sorin CRM SAS	100
Sorin Group Italia S.r.l.	Via Benigno Crespi, 17 - 20159 Milano, Italy	EUR	100	LivaNova PLC LivaNova Site Mgmt S.r.l. Sorin CRM SAS	90 7 3
Sorin Group Rus LLC	Marshal Proshlyakov str. 30 office 304 123458 Moscow, Russia	RUB	100	Sorin Group Italia S.r.l.	100
Sorin Medical (Shanghai) Co. Ltd	Room 218, 2nd Floor, No. 56 Meisheng Road, China (Shanghai) Pilot Free Trade Zone	CNY	100	LivaNova Holding S.r.l.	100
Sorin Medical Devices (Suzhou) Co. Ltd	No. 130, Weihe Road, Suzhou Industrial Park, Jiangsu Province, PRC	CNY	100	LivaNova Holding S.r.l.	100

Note 6. Other Financial Assets

Our current financial assets in the balance sheet include receivables from subsidiaries. These represent loans and current receivable balances due from our subsidiaries and are repayable on demand.

(in thousands)	31 December 2017	31 December 2016
Financial receivables due from subsidiaries	$ 321,649	$ 250,172

Note 7. Trade Receivables and Allowance for Bad Debt

Trade receivables consisted of the following (in thousands):

	31 December 2017	31 December 2016
Trade receivables due from third parties	$ 281	$ 260
Trade receivables due from LivaNova subsidiaries	5,442	14,628
Allowance for bad debt	(276)	(243)
Total	$ 5,447	$ 14,645

Trade receivables are reported net of the allowance for bad debt provision, the changes in which are provided below (in thousands):

	31 December 2017	31 December 2016
Beginning of period	$ 243	$ 250
Additions	—	—
Currency translation gains/losses	33	(7)
End of period	$ 276	$ 243

Note 8. Derivative Financial Instruments

We enter into derivative instruments, principally foreign exchange forward and interest rate swaps contracts for the purpose of hedging the risk of fluctuations in foreign exchange and interest rates. For additional details refer to our accounting policy “Derivatives” included within “Note 2. Basis of Preparation, Use of Accounting Estimates and Significant Accounting Policies”.

Freestanding derivative forward contracts

Freestanding derivative forward contracts are used to offset the exposure to the change in value of our foreign currency denominated financial intercompany transactions (current accounts and loans) of certain long-term loans and the hedging of net revenues denominated in JPY and GBP of LivaNova subsidiaries. The gross notional amount of these contracts not designated as hedging instruments, outstanding at 31 December 2017 and 31 December 2016 was $231.9 million and $489.1 million, respectively.

The amount and location of the gains (losses) in the statements of (loss) income related to derivative instruments, not designated as hedging instruments, are as follows (in thousands):

Derivatives Not Designated as Hedging Instruments	Location	Year Ended 31 December 2017	Year Ended 31 December 2016
Foreign currency exchange rate contracts	Foreign exchange	$ (11,678)	$ 10,960

Interest rate swaps

The Company has a long-term loan from a EIB that bears floating-rate interest rate. To minimize the impact of changes in interest rates on its interest payments under the EIB loan, the Company entered into interest rate swap agreements to swap floating-rate interest payments for fixed-rate interest payments. The outstanding notional amount at 31 December 2017 and 31 December 2016 was $56.0 million and $63.2 million, respectively. The interest rate swap agreements mature in June 2021 and have periodic interest settlements. The interest rate

swap agreements were designated as a cash flow hedge of the variability of interest payments under the EIB long-term loan agreement due to changes in the floating interest rates by converting from Euribor 3 months floating-rate to a fixed-rate loan.

Presentation in Financial Statements

The amount of gains (losses) and location of the gains (losses) in the statements of income and accumulated OCI related to interest rate swap derivative instruments designated as cash flow hedges are as follows (in thousands):

	Year Ended 31 December 2017		
	Gross Gains Recognised in OCI on Effective Portion of Derivative	Effective Portion of Gains (Losses) on Derivative Reclassified from:	
Derivatives in Cash Flow Hedging Relationships	Amount	Location	Amount
Interest rate swap contracts	$ —	Interest expense	$ 939

	Year Ended 31 December 2016		
	Gross Gains Recognised in OCI on Effective Portion of Derivative	Effective Portion of Gains (Losses) on Derivative Reclassified from:	
Derivatives in Cash Flow Hedging Relationships	Amount	Location	Amount
Interest rate swap contracts	$ 85	Interest expense	$ 458

The following tables summarize the location and fair value amounts of derivative instruments reported in the Company's balance sheet as of 31 December 2017 (in thousands):

	Asset Derivatives		Liability Derivatives	
Derivatives designated as hedging instruments	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Interest rate contracts		$ —	Non-current financial derivative liabilities	$ 1,294
Interest rate contracts		—	Current financial derivative liabilities	751
Total derivatives designated as hedging instruments		—		2,045
Derivatives not designated as hedging instruments				
Foreign currency exchange rate contracts	Current financial derivative assets	941	Current financial derivative liabilities	—
Total derivatives not designated as hedging instruments		941		—
Total derivatives		$ 941		$ 2,045

The following tables summarize the location and fair value amounts of derivative instruments reported in the Company's balance sheet as of 31 December 2016 (in thousands):

	Asset Derivatives		Liability Derivatives	
Derivatives designated as hedging instruments	**Balance Sheet Location**	**Fair Value**	**Balance Sheet Location**	**Fair Value**
Interest rate contracts		$ —	Non-current financial derivative liabilities	$ 1,392
Interest rate contracts		—	Current financial derivative liabilities	942
Total derivatives designated as hedging instruments		—		2,334
Derivatives not designated as hedging instruments				
Foreign currency exchange rate contracts	Current financial derivative assets	8,269	Current financial derivative liabilities	—
Total derivatives not designated as hedging instruments		8,269		—
Total derivatives		$ 8,269		$ 2,334

Note 9. Equity

Share capital.

The Company's authorised share capital is as follows:

(in number of shares)	**31 December 2017**	**31 December 2016**
Authorised share capital, ordinary shares of £1 each, unlimited shares authorized		
Issued - fully paid	48,290,276	48,156,690
Outstanding	48,290,276	48,156,690

Merger relief reserve. On 19 October 2015 pursuant to the Mergers the merger relief reserve of $2,649.6 million was recorded in respect of the excess of Sorin and Cyberonics mergers with and into the Company. Further information relating to the Mergers is detailed in "Note 1. Nature of Operations".

Share repurchase plans. On 1 August 2016, the Board of Directors authorized a share repurchase plan pursuant to an authority granted by shareholders at the 2016 annual general meeting held on 15 June 2016. The repurchase program was structured to enable us to buy back up to $30 million of Ordinary Shares on Nasdaq in the period ended 31 December 2017 and an aggregate of $150 million of Ordinary Shares (inclusive of the $30 million of Ordinary Shares set out above) also on Nasdaq up to and including 31 December 2018. In November 2016, the share repurchase plan was amended to authorize the repurchase up to $50 million of Ordinary Shares through 31 December 2017 (instead of the originally authorized $30 million). Shares repurchased under the repurchase plan are cancelled. As of 31 December 2016, the Company purchased 993,339 shares under this plan at a cost of $50.0 million at an average price per share of $50.32. All the repurchased shares have been cancelled and are no longer considered issued or outstanding. The Company did not purchase any additional shares during the year ended 31 December 2017.

Capital Reduction. In March 2016 the Company capitalised $2,583.1 million of the Merger Reserve in order to create distributable reserves in the accounts of the Company. The reserves may be used for any corporate purpose of the Company for which realized profits are required.

Accumulated other comprehensive income. The table below presents the change in each component of accumulated other comprehensive income (loss), net of tax and the reclassifications out of accumulated other comprehensive income into net earnings (in thousands):

	Change in unrealised gain (loss) on derivatives	Foreign currency translation adjustments	Revaluation of net liability (asset) for defined benefits	Total
Ending Balance - 31 December 2015	$ 83	$ (22,665)	$ (5)	$ (22,587)
Reclassification of (gain)/loss from accumulated other comprehensive income, before tax	85	606	(6)	685
Tax effect	(28)	—	1	(27)
Reclassification of (gain)/loss from accumulated other comprehensive income, after tax	57	606	(5)	658
Reclassification of (gain)/loss from accumulated other comprehensive income, before tax	458	—	—	458
Ending Balance - Tax effect	(268)	—	—	(268)
Ending Balance - Reclassification of (gain)/loss from accumulated other comprehensive income, after tax	190	—	—	190
Ending Balance - Net current-period other comprehensive income (loss), net of tax	247	606	(5)	848
Ending Balance - 31 December 2016	330	(22,059)	(10)	(21,739)
Reclassification of (gain)/loss from accumulated other comprehensive income, before tax	—	59,367	(6)	59,361
Tax effect	—	—	—	—
Reclassification of (gain)/loss from accumulated other comprehensive income, after tax	—	59,367	(6)	59,361
Reclassification of (gain)/loss from accumulated other comprehensive income, before tax	(939)	—	—	(939)
Tax effect	402	—	—	402
Reclassification of (gain)/loss from accumulated other comprehensive income, after tax	(537)	—	—	(537)
Net current-period other comprehensive income (loss), net of tax	(537)	59,367	(6)	58,824
Ending Balance - 31 December 2017	$ (207)	$ 37,308	$ (16)	$ 37,085

Note 10. Financial Liabilities

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

	Principal Amount at 31 December 2017	Principal Amount at 31 December 2016	Maturity	Effective Interest Rate in 2017
European Investment Bank	$ 69,894	$ 78,987	June 2021	0.95%
Loans payable to LivaNova subsidiaries	134,247	111,013		
Total long-term facilities	204,141	190,000		
Less current portion of long-term debt	(19,964)	(17,542)		
Total long-term debt	$ 184,177	$ 172,458		

The outstanding principal amount of short-term debt consisted of the following (in thousands, except interest rates):

	Principal Amount at 31 December 2017	Principal Amount at 31 December 2016	Effective Interest Rate in 2017
Intesa San Paolo Bank	$ 23,985	$ —	
Barclays	20,000	—	2.33%
Unicredit Banca	7,196	8,433	0.20%
BNL BNP Paribas	—	7,379	0.13%
Other short-term facilities	136	50	
Loans payable to LivaNova subsidiaries	526,938	469,909	
Total short-term facilities	578,255	485,771	
Current portion of long-term debt	19,964	17,542	
Total current debt	$ 598,219	$ 503,313	

The EIB loan was originally issued in July 2014, has a seven-year term with interest paid in quarterly installments. The loan is guaranteed by Sorin Group Italia S.r.l. and Sorin CRM SAS, subsidiaries of LivaNova.

The EIB loan is subject to various terms and conditions:

- certain financial ratios calculated based on the LivaNova consolidated financial statements;
- subordination clauses, based on which the loan cannot be subordinated to other loans, with the exception of loans given preference deriving from legal obligations
- negative pledge clauses that place limits on the issue of collateral;
- other customary clauses for loans of this type, including limits on LivaNova's asset disposals.

LivaNova PLC, in the management of LivaNova centralized treasury and acting as in-house bank of the Group, receives excess cash from subsidiaries which generate cash.

In December 2015 LivaNova PLC issued a promissory note in favor of LIVN UK Holdco, in the amount of $111 million for the settlement of the purchase price of LivaNova Canada Corp. The promissory note bears a fixed interest rate of 0.56% p.a. and has an expiry date on 31 December 2022.

Note 11. Other Payables

(in thousands)	31 December 2017	31 December 2016
Accrued expenses- employee-related charges	$ 4,093	$ 3,211
Other accrued expenses	4,457	2,916
Other current liabilities with subsidiaries	3,163	3,000
Other current liabilities	461	753
Other amounts due to health and social security institution	1,535	109
Amounts due to employees	96	684
Total	$ 13,805	$ 10,673

Note 12. Share-Based Incentive Plans

Share-Based Incentive Plans

On 16 October 2015, we approved the adoption of the Company's 2015 Incentive Award Plan, which was previously approved by the Board of Directors of the Company on 14 September 2015 subject to such shareholder approval. The Plan was adopted in order to facilitate the grant of cash and equity incentives to non-employee directors, employees (including our named executive officers) and consultants of the Company and certain of our affiliates and to enable the Company and certain of our affiliates to obtain and retain services of these individuals. The Plan became effective as of 19 October 2015. Incentive awards may be granted under the 2015 Plan in the form of share options, share appreciation rights, restricted share, restricted share units, other share and cash-based

awards and dividend equivalents. As of 31 December 2017, there were approximately 6,115,000 shares available for future grants under the 2015 Plan.

Share Options and Share Appreciation Rights

	The Year Ended 31 December 2017	
Options and SARs	**Number of Optioned Shares**	**Wtd. Avg. Exercise Price**
Exercised	23,939	$ 52.43
Outstanding - end of year	833,892	$ 57.86

The weighted average remaining contractual life for the share options and SARs outstanding at 31 December 2017 is 6.0 years.

The aggregate intrinsic value of the options and SARs outstanding at 31 December 2017 is $18.4 million. The aggregate intrinsic value of options and SARs is based on the difference between the fair market value of the underlying share at the end of the period using the market closing share price, and exercise price for in-the-money awards.

The range of exercise prices for options and SARs outstanding at 31 December 2017 are categorised in exercise price ranges as follows:

Outstanding Options	**31 December 2017**
$21-30	3,340
$41-50	183,250
$51-60	367,900
$61-70	275,301
$71-80	4,101
Total	833,892

Restricted Share and Restricted Share Units Awards

The following tables detail the activity for service-based restricted share and restricted share unit awards:

	Year Ended 31 December 2017	
	Number of Shares	**Wtd. Avg. Grant Date Fair Value**
Non-vested at end of year	317,211	$ 44.84

(in thousands)	**Year Ended 31 December 2017**
Aggregate fair value of service-based share grants that vested during the year (in thousands)	$ 5,857

The following tables detail the activity for performance-based and market-based restricted share and restricted share unit awards:

	Year Ended 31 December 2017	
	Number of Shares	**Wtd. Avg. Grant Date Fair Value**
Non-vested at end of year	33,202	$ 56.17

(in thousands)	**Year Ended 31 December 2017**
Aggregate fair value of service-based share grants that vested during the year	$ 692,303

Note 13. Income Taxes

Income tax (benefit) expense consists of the following (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Current tax	$ 1,425	$ (1,094)
Deferred tax	2,930	3,117
Income tax (benefit) expense	$ 4,355	$ 2,023

The following is a reconciliation of the statutory income tax rate to our effective income tax rate expressed as a percentage of income before income taxes:

	Year Ended 31 December 2017	Year Ended 31 December 2016
Statutory tax rate at U.K. Rate	19.0%	20.0 %
Change in tax rate	(1.0)	(6.1)
Permanent differences	(20.0)	(0.3)
Adjustment to Italian branch NOL deferred tax asset resulting from the merger	—	(29.1)
Adjustment to Italian branch NOL deferred tax asset from the Italian tax litigation	—	(18.7)
Italian branch tax rate differential	(0.3)	10.0
Distribution of subsidiary earnings	9.8	—
Change in unrecognized deferred tax assets	(2.2)	—
Tax on UK CFC Interest	(1.8)	—
Other, net	0.8	0.9
Effective tax rate	4.3%	(23.4)%

Deferred income tax assets and liabilities are summarised as follows (in thousands):

Deferred tax assets:	31 December 2017	31 December 2016
Net operating loss carryforwards	$ 4,855	$ —
Accruals and reserves	1,521	1,409
Share-based compensation	7,149	—
Depreciation & amortisation	47	72
Total deferred tax assets	13,572	1,481
Property, equipment & amortization	(9)	(38)
Other	52	33
Total deferred tax liabilities	43	(5)
Total deferred tax asset (liability)	$ 13,615	$ 1,476

Deferred tax assets have not been recognized with respect of the following items (in thousands):

	31 December 2017	31 December 2016
Tax loss carryforwards	$ 73,104	$ 61,613

Note 14. Commitments and Contingencies

FDA Warning Letter

On 29 December 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 24 August 2015 to 27 August 2015 and the Arvada facility from 24 August 2015 to 1 September 2015. On 27 August 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 Heater-Cooler 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 13 October 2016, the CDC and 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 non-tuberculous mycobacterium 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 18 August 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 13 October 2016, in response to the Warning Letter and CDC's HAN and FDA's Safety Commission, 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 for 3T device users who have reported confirmed M. chimaera mycobacterium contamination. Although the deep disinfection service is not yet available in the U.S., it is currently offered in many countries around the world and will be expanded to additional geographies as we receive the required regulatory approvals.

On 31 December 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 31 December 2017, the product remediation liability was $27.5 million. Refer to "Note 19. Provisions" for additional information.

Litigation

The Company is currently involved in litigation involving our 3T heater-cooler product. 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 27 February 2018, we are involved in approximately 110 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 31 May 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. was created as a result of a spin-off from SNIA S.p.A. in January 2004. SNIA subsequently became insolvent and the Italian Ministry of the Environment and the Protection of Land and Sea, 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 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 1 April 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 28 July 2015, Sorin received an administrative 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 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 28 July 2015, the Public Administrations filed an opposition proceeding to the merger between Sorin and Cyberonics, 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 30 October 2009, the Regional Internal Revenue Office of Lombardy informed Sorin Group Italia S.r.l. that, among several issues, it was disallowing in part (for a total of €102.6 million (approximately $123.0 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 3 February 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 $75.1 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 $20.4 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 (loss) income, financial position or liquidity.

Lease Agreements

We have operating leases for facilities and equipment. Rent expense from all operating leases amounted to approximately $1.8 million and $2.4 million for the years ended 31 December 2017 and 31 December 2016, respectively.

Future minimum lease payments for operating leases as of 31 December 2017 are as follows (in thousands):

No later than 1 year	$	1,669
Later than 1 year and no later than 5 years		5,971
Later than 5 years		3,591
Present value of minimum lease payments	$	11,231

Note 15. Related Parties

Interests in subsidiaries are set out in "Note 5. Investments In subsidiaries". In the normal course of business the Company issues loans, purchases and sells services from/to various related parties in which the Company typically holds a 50% or less equity interest and has significant influence. These transactions are generally conducted with terms comparable to transactions with third parties.

The Company provided LivaNova group companies with support and assistance for human resource development, financial management, legal, tax and corporate assistance.

Payment for the services rendered is made in arrears each month, and interest rates are at arm's length.

Note 16. Statement of (Loss) Income - Expenses by Nature

(in thousands)	Year Ended 31 December 2017	Year Ended 31 December 2016
Revenue	$ 23,630	$ 15,915
Other income	104	129
Cost of materials and services used	(46,353)	(39,836)
Personnel expense	(31,322)	(26,092)
Amortisation, depreciation and impairments	(89,807)	(36,226)
Interest expense	(15,327)	(9,540)
Interest income	58,493	272,341
Foreign exchange	(455)	(17,304)
(Loss) profit before taxes	(101,037)	159,387
Income tax (benefit) expense	(4,355)	2,023
(Loss) profit for the period	$ (96,682)	$ 157,364

Note 17. Employee and Key Management Compensation Costs

Details of Directors' remuneration are included in pages 53 to 66 of the Directors' remuneration report, which forms part of these financial statements.

Employee numbers

The average monthly employee numbers on a full-time equivalent basis, including executive directors were 44 for the years ended 31 December 2017 and 31 December 2016.

Note 18. Exceptional Items

The following exceptional items are included within operating loss (in thousands):

	Year Ended 31 December 2017	Year Ended 31 December 2016
Integration expenses	$ 9,945	$ 7,552
Restructuring expenses	2,661	2,448
CRM investment impairment	89,069	35,510
Total	$ 101,675	$ 45,510

Integration Expenses. Integration expenses consisted primarily of consultation with regard to: our systems integration, organization structure integration, finance, synergy and tax planning and certain re-branding efforts.

Restructuring Expenses. After the consummation of the Mergers between Cyberonics with Sorin in October 2015, we initiated several restructuring plans to combine our business operations. We identify costs incurred and liabilities assumed for the Restructuring Plans.

The Restructuring Plans are intended to leverage economies of scale, eliminate duplicate corporate expenses, streamline distributions and logistics and office functions in order to reduce overall costs.

CRM Investment Impairment. During the years ended 31 December 2017 and 31 December 2016, we recorded $89.1 million and $35.5 million of impairment related to the investment in the Sorin CRM SAS subsidiary. Refer to "Note 5. Investments in Subsidiaries" for further details.

Note 19. Auditors' Remuneration

(in thousands)	Year Ended 31 December 2017	Year Ended 31 December 2016
LivaNova auditors		
Fees payable to the Company's auditors and its associates for the audit of parent company financial statements	$ 68	$ 65
Total audit fees payable to the Company's auditors	$ 68	$ 65

Note 20. Events After Reporting Period

ImThera Acquisition

On 16 January 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 based on achieving regulatory and sales milestones. 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. The ImThera device is aligned with our Neuromodulation business franchise. ImThera has a commercial presence in the European market, and we will be advancing ImThera's enrollment in an FDA pivotal study.

TandemLife Acquisition

On 4 April 2018, we announced the closing of our acquisition of CardiacAssist, Inc., dba TandemLife,, a privately-held Delaware corporation. TandemLife designs, manufactures and commercializes advanced cardiac and respiratory temporary support solutions. We agreed to pay up to $250 million to acquire TandemLife, with upfront costs of approximately $200 million and with up to $50 million in contingent consideration based on achieving regulatory milestones.

Bridge Facility Agreement

On 3 April 2018, in connection with the TandemLife acquisition, we drew down $190.0 million under a a term loan bridge facility agreement at an interest rate of 2.63%. The Bridge Facility Agreement will terminate on 14 August 2018, but may be extended to 13 February 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.

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.

The proceeds of the Bridge Facility are intended to be used to fund the acquisition and pay related expenses, refinance certain indebtedness and for general corporate and working capital purposes.

GLOSSARY AND DEFINITIONS

The following definitions apply throughout this UK Annual Report (other than in the Financial Statements) unless the context requires otherwise:

"Act"	U.S. enacted the Tax Cuts and Jobs Act;
“Affordable Care Act”	the U.S. Patient Protection and Affordable Care Act, as amended by the Health Care and Educational Reconciliation Act;
"AFS"	Available-for-Sale;
“Anti-Kickback Statute”	the U.S. federal Anti-Kickback Statute;
“Auditor”	PricewaterhouseCoopers LLP, the Company’s independent UK statutory auditor;
"Award Value"	the equity award value;
"Brexit"	the UK government's process to withdraw from the EU;
“business unit”	LivaNova’s three principal business units, Neuromodulation, Cardiac Surgery and CRM;
“Caisson”	Caisson Interventional LLC;
"CDC"	Centers for Diseases Control and prevention;
“CEO”	Chief Executive Officer;
“CE Mark”	certification demonstrating minimum standards of performance, safety and quality (i.e., the essential requirements) set out in the EU Medical Devices Directives (Council Directive 93/42/EEC on Medical Devices and Council Directive 90/385/EEC on Active Implantable Medical Devices);
"CFC"	the UK's Controlled Foreign Company
“CFO”	Chief Financial Officer;
"CGUs"	Cash Generating Units;
"CID"	Civil Investigative Demand;
"closing price"	the most recent closing price of an ordinary share of our stock on the Nasdaq as of the grant date;
“CMS”	the Centers for Medicare and Medicaid Services;
“Code”	the US Internal Revenue Code;
"CODM"	the Chief Operating Decision Maker;
“Company”	LivaNova PLC, a company incorporated in England and Wales;
“Companies Act”	the Companies Act 2006 of England and Wales;
“CRM”	Cardiac Rhythm Management business franchise;
“CSA”	Central Sleep Apnoea;
"CS"	Cardiac Surgery business franchise;
“Cyberonics”	Cyberonics. Inc., a Delaware corporation, including (whether the context requires) its subsidiaries and subsidiary undertakings;
“Cyberonics merger”	the merger of Merger Sub with and into Cyberonics, with Cyberonics continuing as the surviving company and a wholly-owned subsidiary of the Company;
“DAB”	the Departmental Appeals Board of the US Department of Health and Human Services;
“Data Protection Directive”	the Directive 95/46/EC;
"D.S.O."	Days of Sales Outstanding;
"DTC"	Depository Trust & Clearing Corporation;
"EC"	the European Commission;
“EEA”	the European Economic Area;
“EIB”	European Investment Bank;
"EIR"	Effective Interest Rate;
"EPS"	Earnings Per Share;
“EU”	the European Union;
"EVP"	the Employment Value Proposition;
“False Claims Act”	the U.S. Federal False Claims Act;

"FCF"	Free Cash Flow;
“FCPA”	the U.S. Foreign Corrupt Practices Act of 1977;
"FDA"	Food and Drug Administration;
"FDCA"	Food, Drug and Cosmetics Administration;
"FIFO"	First-In First-Out;
“FSCAs”	Field Safety Corrective Actions;
"FX"	Foreign Exchange;
"GBP"	British Pound Sterling;
"GDPR"	General Data Protection Regulation;
"GHG"	Greenhouse Gas;
"HAFTA"	the Highway and Transportation Funding Act of 2014;
"HAN"	Health Advisory Notice;
“Highlife”	Highlife S.A.S.;
“HIPAA”	the U.S. Health Insurance Portability and Accountability Act of 1996;
“HITECH”	the U.S. Health Information Technology and Clinical Health Act;
"HLM"	Heart-Lung Machine;
"HMRC"	Her Majesty's Revenue & Customs;
“IDE”	Investigational Device Exemption;
“IFRS”	International Financial Reporting Standards, as adopted by the EU;
“Incentive Award Plan”	the LivaNova PLC 2015 Incentive Award Plan;
“ImThera”	ImThera Medical, Inc.;
“IRBs”	Institutional Review Boards;
“ISO”	the International Standards Organisation;
“IRS”	the U.S. Internal Revenue Service;
“ISDA”	International Swaps and Derivatives Association, Inc.;
“KPI”	Key Performance Indicator;
“LivaNova”	the Company and its subsidiaries and subsidiary undertakings, including (where the context so requires) Cyberonics and Sorin prior to the Mergers becoming effective;
"LOI"	Letter of Intent;
“LSE”	the London Stock Exchange plc;
"LTIP"	Long Term Incentive Plan;
"main market"	the LSE Main Market;
“MDET”	Medical Device Excise Tax;
“MDR”	Medical Device Reporting regulations;
“measurement dates”	the end of the three-year phase-in period and on the last day of each financial year thereafter;
"Medical Devices Regulation"	proposals for the revision of the EU regulatory framework for medical devices which would replace the Medical Devices Directive and the Active Implantable Medical Devices Directive;
“Merger”	the business combination of Cyberonics and Sorin
“MRI”	Magnetic Resonance Imaging;
“MHLW”	the Ministry of Health, Labour and Welfare of Japan;
"MMWR"	Morbidity and Mortality Weekly Report;
“Nasdaq”	the Nasdaq Global Market;
“New Ventures”	LivaNova’s corporate business development;
"NOLs"	the Net Operating Losses;
“NTM”	NonTuberculous Mycobacterium;
"OCI"	Other Comprehensive Income;

“Official List”	the official list of listed securities maintained by the FCA;
“Ordinary Shares”	Ordinary Shares of £1.00 each in the capital of the Company;
“OSA”	Obstructive Sleep Apnoea;
"our"	LivaNova Plc collectively with its subsidiaries;
“PAL”	the Pharmaceutical Affairs Law of Japan;
“Pearl Meyer”	Pearl Meyer & Partners, LLC, an independent compensation consultant with an international scope;
“PMA”	Pre-Market Approval;
“PMDA”	the Pharmaceutical and Medical Devices Agency of Japan;
"PP&E"	Property, Plan & Equipment;
“Principles”	the United Nations Guiding Principles on Human Rights;
“PRT”	Phospholipid Reduction Treatment;
"PSU"	Performance Stock Units;
"Purchase Agreement"	Stock and Purchase Agreement to sell CRM business franchise to Microport cardiac Rhythm B.V.;
“QSR”	the U.S. FDA’s Quality System Regulation under section 520 of the U.S. FDCA;
“Restructuring Plan”	the restructuring plan initiated by LivaNova after consummation of the Mergers in October 2015;
“R&D”	Research and Development;
“RSUs”	Restricted Stock Units;
"rTSR"	relative Total Shareholder Return;
“SAM”	Sleep Apnoea Monitoring;
“SARs”	Stock Appreciation Rights;
"SDRT"	the UK stamp duty reserve tax;
“SEC”	the U.S. Securities and Exchange Commission;
“Section 4985 Excise Tax”	the tax imposed under section 4985 of the Code;
“Section 7874”	section 7874 of the Code;
“Section 7874 Percentage”	the percentage of ownership requirements imposed by Section 7874 under which a company may be considered to be a corporation foreign to the U.S.;
“SG&A”	Selling, General and Administrative;
"shares"	LivaNova's ordinary shares of £1 per share;
“Sorin”	Sorin S.p.A., a joint stock company organised under the laws of Italy, including (where the context so requires), its subsidiaries and subsidiary undertakings;
“Sorin merger”	the merger of Sorin with and into the Company, with the Company continuing as the surviving company;
"STIP"	Short Term Incentive Plan;
"TFR"	severance indemnity;
"the Code"	the City Code on Takeovers and Mergers;
"the Company”	LivaNova Plc collectively with its subsidiaries;
"the Plans"	LivaNova's 2015 and 2016 Reorganization Plans initiated October 2015 and March 2016, respectively, in conjunction with the completion of the Cyberonics and Sorin merger;
"the Public Administrations"	the Italian Ministry of the Environment and other Italian government agencies;
"the TAR"	the Administrative Court of Lazio;
"TMVR"	Transcatheter Mitral Valve Replacement
“transitional period”	the results from operations for Cyberonics for the period 25 April 2015 to 31 December 2015 and the results of operations for Sorin for the period 19 October 2015 to 31 December 2015;
“TRD”	Treatment Resistant Depression;
"UK"	the United Kingdom;
“UK Bribery Act”	the UK Bribery Act of 2010;

“US”	the United States of America;
"USD"	the U.S. dollar
"US EPA"	the U.S. Environmental Protection Agency;
“US GAAP”	the accounting principles generally accepted in the U.S.;
“VNS”	Vagus Nerve Stimulation;
"WACC"	Weighted Average Cost of Capital;
"we"	LivaNova Plc collectively with its subsidiaries;
“$”	U.S. dollars;
"2018 LTIP"	2018 annual Long-Term Incentive Program;
"2018 rTSR Peer Group"	peer group of 27 companies selected by the Committee’s compensation consultant;
"3T device"	3T Heater-Cooler device;

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Health innovation that matters

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