First-Quarter 2017 Earnings
Performance

May 3, 2017

Health innovation that matters

Safe Harbor

This material contains forward-looking statements within the meaning of Section 27A of the United States Securities Act of 1933, as amended, and Section 21E of the United States Securities Exchange Act of 1934, as amended. Forward-looking statements are not historical facts but are based on certain assumptions of management and describe the Company's future plans, strategies and expectations. Forward-looking statements can generally be identified by the use of forward-looking terminology, including, but not limited to, "may," "could," "seek," "guidance," "predict," "potential," "likely," "believe," "will," "expect," "anticipate," "estimate," "plan," "intend," "forecast," or variations of these terms and similar expressions, or the negative of these terms or similar expressions. Forward-looking statements contained in this material are based on information presently available to LivaNova and assumptions that the Company believes to be reasonable, but are inherently uncertain. As a result, the Company's actual results, performance or achievements may differ materially from those expressed or implied by these forward-looking statements, which are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors that are, in some cases, beyond the Company's control. Investors are cautioned that all such statements involve risks and uncertainties, including without limitation, statements concerning accelerating TMVR clinical and regulatory efforts to achieve CE Mark by 2019 and US approval several years later, making TMVR positively accretive to earnings, becoming a leading player in TMVR, implementing our vacuum and internal sealing solution in Europe in 2Q 2017 and in all 3T Heater Cooler machines in the US and rest of world thereafter to address the aerosolization issue and ensure the continued availability of the device, delivering HLM innovations, and financial guidance for the full year of 2017. Important factors that may cause actual results to differ include, but are not limited to: (i) risks that the legacy businesses of Cyberonics, Inc. and Sorin S.p.A. (together, the "combined companies") will not be integrated successfully or that the combined companies will not realize estimated cost savings, value of certain tax assets, synergies and growth, or that such benefits may take longer to realize than expected; (ii) the inability of LivaNova to meet expectations regarding the timing, completion and accounting of tax treatments; (iii) risks relating to unanticipated costs of integration, including operating costs, customer loss or business disruption being greater than expected; (iv) organizational and governance structure; (v) reductions in customer spending, a slowdown in customer payments and changes in customer demand for products and services; (vi) unanticipated changes relating to competitive factors in the industries in which LivaNova operates; (vii) the ability to hire and retain key personnel; (viii) the ability to attract new customers and retain existing customers in the manner anticipated; (ix) the reliance on and integration of information technology systems; (x) changes in legislation or governmental regulations affecting LivaNova; (xi) international, national or local economic, social or political conditions that could adversely affect LivaNova, its partners or its customers; (xii) conditions in the credit markets; (xiii) business and other financial risks inherent to the industries in which LivaNova operates; (xiv) risks associated with assumptions made in connection with critical accounting estimates and legal proceedings; (xv) LivaNova's international operations, which are subject to the risks of currency fluctuations and foreign exchange controls; (xvi) and the potential of international unrest, economic downturn or effects of currencies, tax assessments, tax adjustments, anticipated tax rates, raw material costs or availability, benefit or retirement plan costs, or other regulatory compliance costs. The foregoing list of factors is not exhaustive. You should carefully consider the foregoing factors and the other risks and uncertainties that affect the Company's business, including those described in the "Risk Factors" section of Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, the Registration Statement on Form S-4 and other documents filed from time to time with the United States Securities and Exchange Commission by LivaNova. LivaNova does not give any assurance (1) that LivaNova will achieve its expectations, or (2) concerning any result or the timing thereof, in each case, with respect to any regulatory action, administrative proceedings, government investigations, litigation, warning letters, consent decree, cost reductions, business strategies, earnings or revenue trends or future financial results. All information in this presentation is as of the date of its release. The Company does not undertake or assume any obligation to update publicly any of the forward-looking statements in this presentation to reflect actual results, new information or future events, changes in assumptions or changes in other factors affecting forward-looking statements, except to the extent required by applicable law. If we update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements. We caution you not to place undue reliance on any forward-looking statements, which are made only as of the date of this presentation.

Agenda

- Highlights
- Financial Results
- 2017 Guidance
- Summary

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Highlights

Caisson

Focused on Transcatheter Mitral Valve Replacement (TMVR)

Rationale for Deal

- Caisson has a dedicated and innovative team working on revolutionary technology in transcatheter mitral valve replacement (TMVR) field
- LivaNova currently sells a portfolio for surgical mitral valve replacement and repair
- Combined strengths of both organizations likely to accelerate ability to advance clinical and regulatory efforts
- External estimates show market potential as multi-billion dollar global market
- Positions LivaNova to be leading player

Caisson

Focused on Transcatheter Mitral Valve Replacement (TMVR)

Caisson Technology

- Only product designed solely for transseptal approach and delivered through a single venous access
- Implant consists of two components:
  - * an anchor constructed of a nitinol frame, and
  - * a pericardial tissue valve attached to a nitinol frame
- Implant is designed to be fully retrievable once the function of the implant is fully assessed, but prior to final release
- Believe vast majority of procedures will use a transseptal approach, which is aligned with Caisson's technology

Caisson

Focused on Transcatheter Mitral Valve Replacement (TMVR)

Clinical Trials

- PRELUDE[1] early feasibility study approved by FDA on April 15, 2016
  - * 20 patients, 8 centers
  - * 6 patients enrolled; 5 patients successfully implanted
  - * study designed to provide initial data on safety and performance of the Caisson TMVR system
- Canada Special Access Program - approved for implant under compassionate grounds
  - * 1 patient successfully implanted
- Patient enrollment in Europe CE mark trial (INTERLUDE) will begin this year
  - * approved in Canada - will begin patient enrollment mid-year
  - * Europe/U.S. - will begin patient enrollment toward end of 2017
- Targeting CE mark in late 2018 or in 2019
- Targeting U.S. FDA approval several years after CE mark

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(1) Data presented at Third Annual Zurich Mitral Valve Meeting in early February 2017.

Caisson

Focused on Transcatheter Mitral Valve Replacement (TMVR)

Financials

- $72M purchase price, net of $6M of debt forgiveness for remaining 51% of company
- Payment schedule
  - 25% upfront payment at closing
  - 30% based on sales earn-out
  - 45% based on milestones
- Near to mid-term: dilutive to earnings due to R&D & clinical trial spend, manufacturing and commercial investment
- Long-term: positively accretive to earnings; value creation for shareholders

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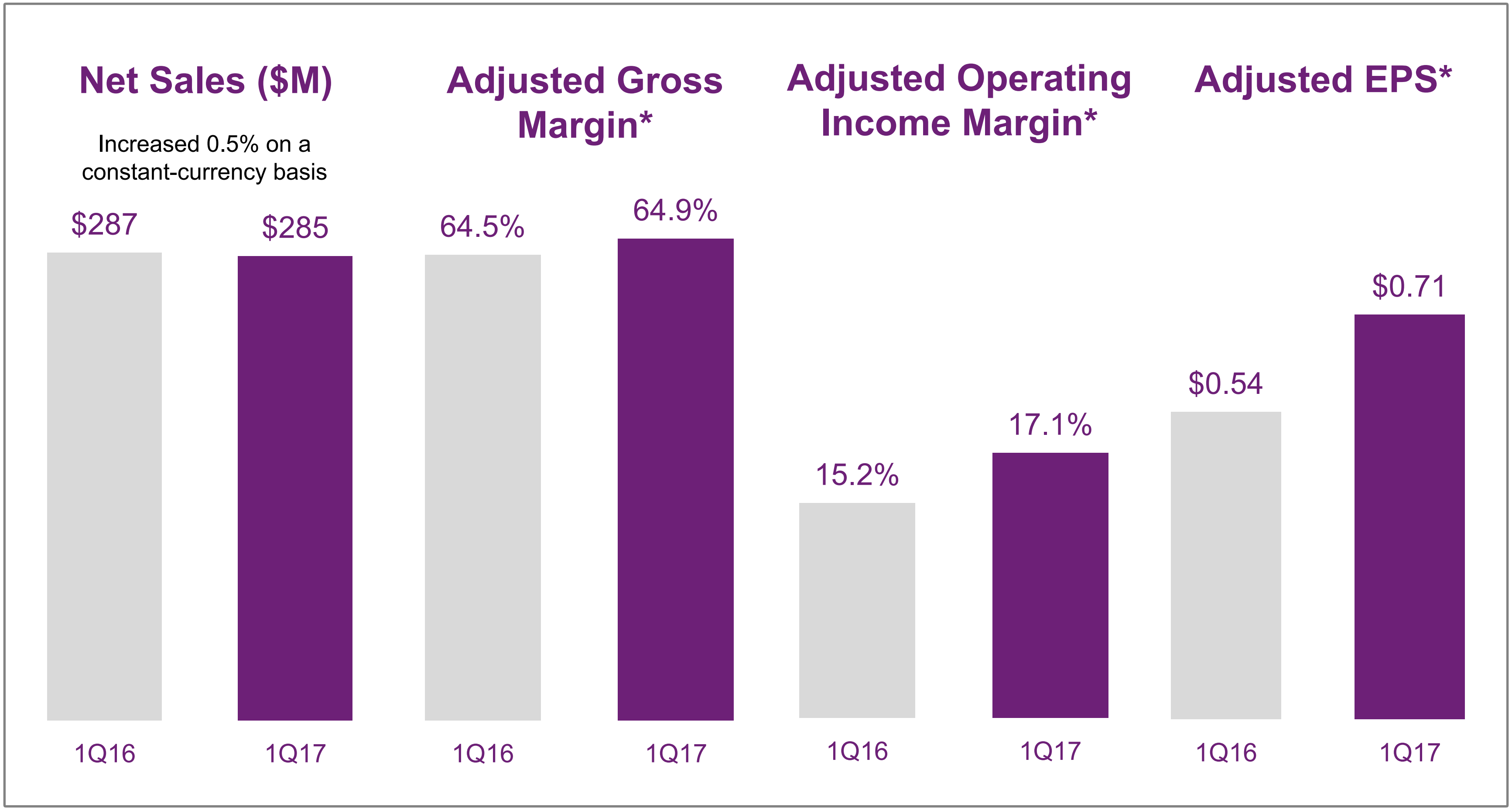
Update on 3T Heater-Cooler devices

Device Remediation Plan

- Developed Device Remediation Plan, which includes loaner program, deep disinfection service and design modification
- Final verification and validation is complete. Obtained CE mark in April for this solution, which is intended to be a permanent design modification to address aerosolization issue
- Training for our representatives is taking place
- Implementation of the design modification will begin in the field in the next few weeks
  - * Will begin in Western Europe followed by multiple other countries as we receive regulatory approval
  - * At no cost to customers
- In U.S., continue to make progress and work collaboratively with FDA toward implementation of our remediation plan

Financial Results

1Q17 At a Glance:
Improving adjusted margins



* Adjusted gross margin, operating margin and diluted EPS are adjusted non-GAAP measures. Non-GAAP measures are reconciled to GAAP measures in the appendix.

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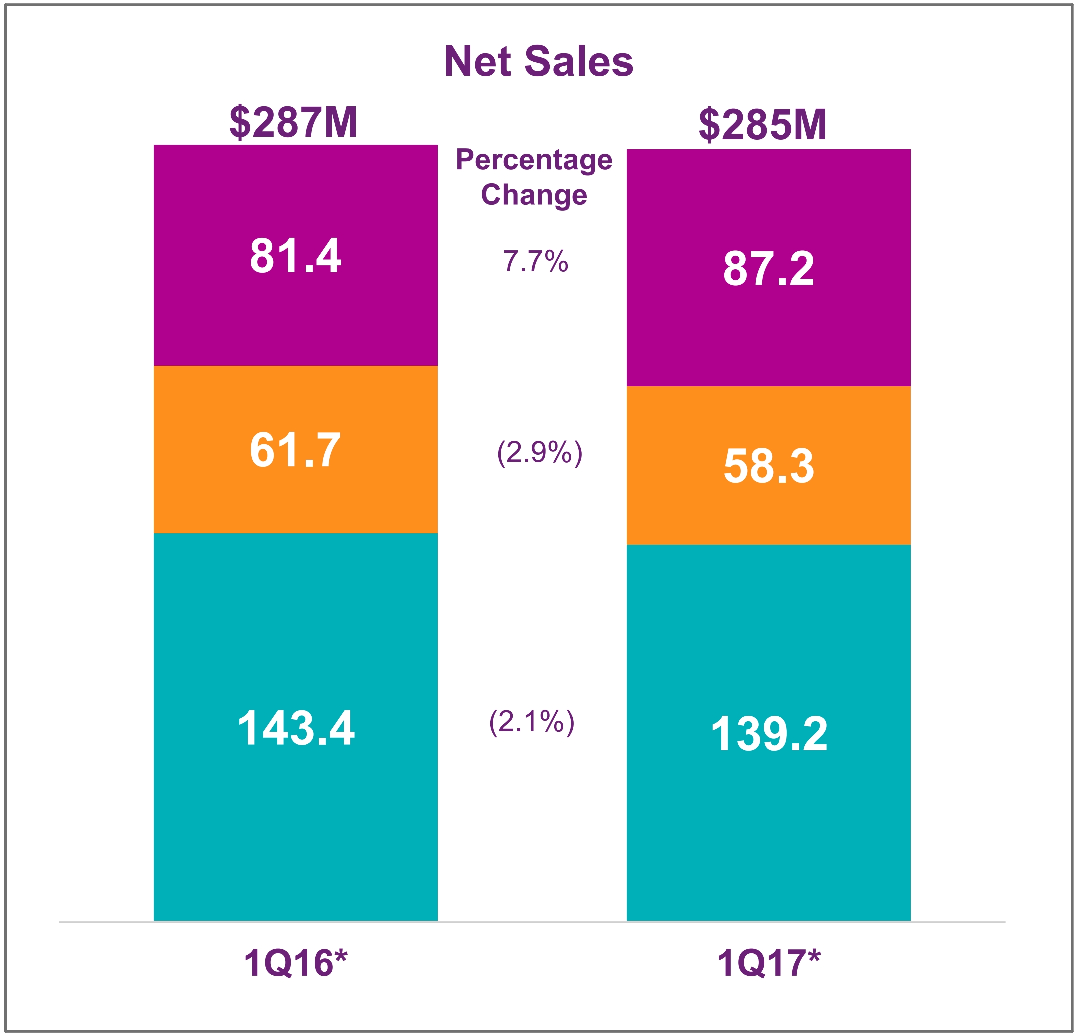
1Q17 Net Sales



1Q17 drivers/impacts

Neuromodulation:
- \+ Aspire SR performed well from both a volume and price perspective
- \+ Maintained strong new patient growth

CRM:
- \+ Growth in KORA 250 pacemaker in Japan
- \+ Growth in PLATINIUM CRT-D due to recent incorporation of IS4 standard
- \- Softness in ICD's due to strong quarter last year with roll-out of PLATINIUM ICD

Cardiac Surgery:
- \+ Solid performance in tissue heart valves, driven by demand for Perceval
- \- Declines in mechanical heart valves
- \- Softness in sales of heart-lung machines in U.S.
- \- Impact of heater/cooler loaner program

* Percent change performance is shown on a year-over-year (YOY) constant-currency basis, which is a non-GAAP measure. Constant-currency does not include the impact from foreign currency fluctuations.

1Q17 Key Adjusted Financial Results*

	1Q17	YOY Performance	% of Net Sales
Gross margin	$185.1M	0.0%	64.9%
SG&A	$106.9M	(3.0%)	37.5%
R&D	$29.4M	(6.4%)	10.3%
Operating income	$48.8M	12.2%	17.1%
Net income	$34.2M	29.1%	12.0%

* All financial measures are adjusted non-GAAP measures. Non-GAAP measures are reconciled to GAAP measures in the appendix.

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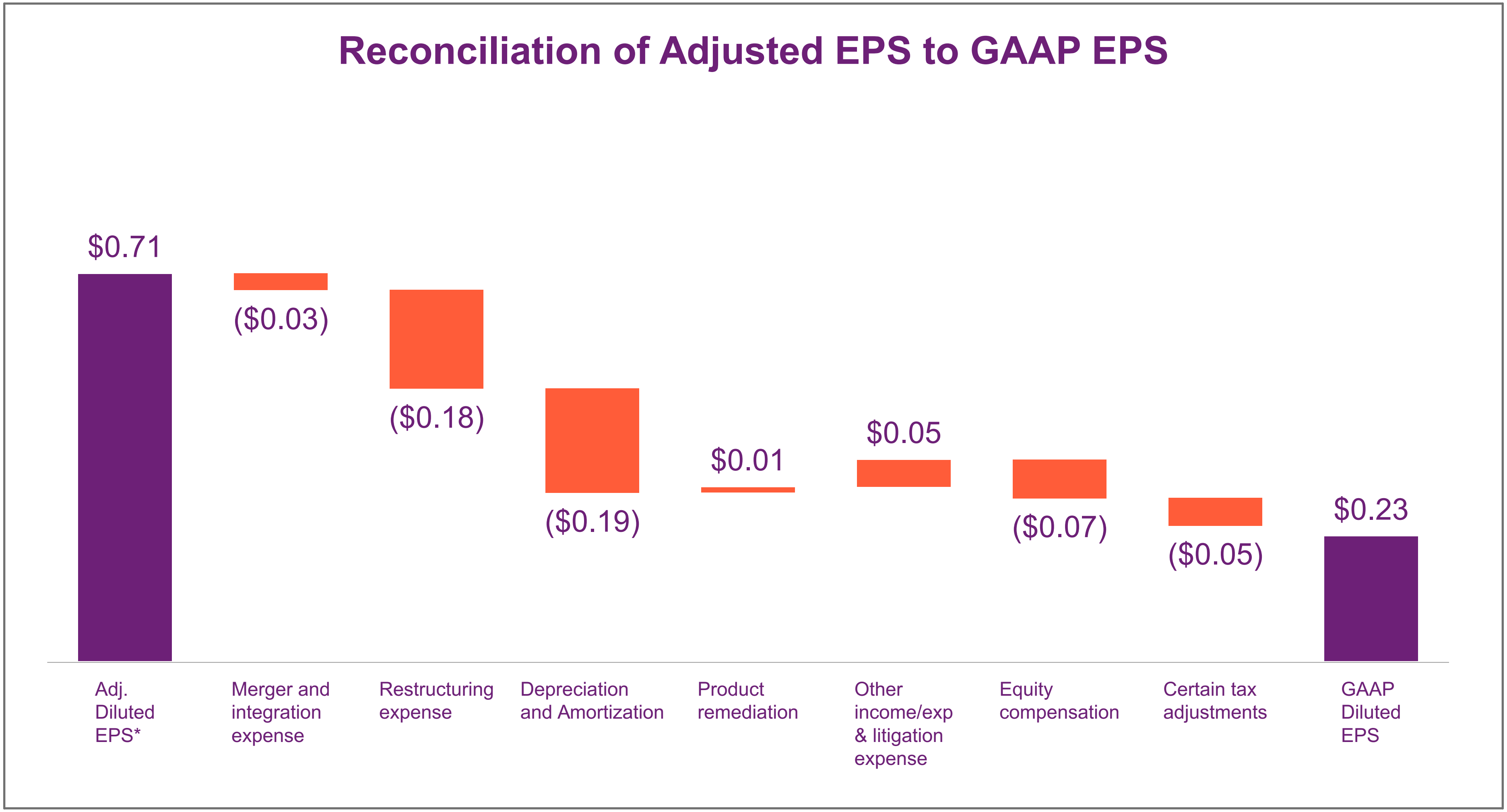
1Q17 Adjusted EPS*



* Adjusted diluted EPS is a non-GAAP measure. Non-GAAP measures are reconciled to GAAP measures in the appendix.

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2017 Guidance

Revising Full-year 2017 Guidance

	Revised Guidance at May 3, 2017	Previous Guidance at March 1, 2017
Worldwide net sales growth (1)	1% - 3%	1% - 3%
Adjusted gross margin (2)	Mid-60%	Mid-60%
Adjusted operating margin (2)	High teens	High teens
Adjusted effective tax rate (2) (3)	24% - 25%	24% - 25%
Adjusted diluted EPS (2)	\$3.10 - \$3.30	\$3.25 - \$3.45
Diluted weighted average shares	~49M	~49M
Cash flow from operations (4)	\$170M - \$190M	\$190M - \$210M
Capital spending	\$40M - \$50M	\$40M - \$50M

1. Net sales are on a constant-currency basis, which excludes the impact of foreign currency. The impact from foreign currency is expected to be negative 1% to 0% if current rates prevail.
2. Adjusted gross margin, operating margin, tax and diluted earnings per share are non-GAAP measures. Non-GAAP measures are reconciled to GAAP measures in the appendix.
3. Tax expense excludes interest in minority investments.
4. Excludes integration, restructuring and 3T remediation payments.

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Summary

Summary

1Q17 results

- Started out 2017 delivering solid sales, leveraging our income statement and driving strong cash generation
- Growth drivers (i.e. AspireSR, Perceval, INSPIRE, KORA 250) continue to gain momentum
- Recently submitted application to the FDA for SenTiva, our newest VNS Therapy device

Progress in other areas of business

- Completed acquisition of Caisson
  - entry into TMVR space
  - potential to be important growth platform in future
  - unique technology to offer patients most advanced, minimally invasive mitral valve replacement option
- Made progress with 3T heater-cooler Device Remediation Plan
  - completion of CE mark
  - starting implementation of design modification in next several weeks

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Appendix

GAAP to Non-GAAP Reconciliations

U.S. dollars in millions, except per share amounts

Three Months Ended March 31, 2017	Sales	Gross Profit	Income from Operations	Net Income (Loss)	Diluted EPS
GAAP Financial Measures	$285.1	$184.4	$18.6	$11.3	$0.23
Specified Items					
Merger and integration expense (A)			2.2	1.6	0.03
Restructuring expense (B)			10.1	8.8	0.18
Depreciation and Amortization (C)		1.4	13.2	9.3	0.19
Product remediation (D)		(0.8)	(0.8)	(0.5)	(0.01)
Other Income Expenses & Litigations (E)			1.6	(2.2)	(0.05)
Equity compensation (F)			3.8	3.3	0.07
Certain tax adjustments (G)				2.5	0.05
Adjusted financial measures	$285.1	$185.1	$48.8	$34.2	$0.71

GAAP results for the three months ended March 31, 2017 include:

(A) Expense related to merger and integration activities
(B) Restructuring expenses, related to recent organizational changes and to the shutdown of our oxygenators plant in China
(C) Includes depreciation and amortization associated with final purchase price accounting
(D) Cost related to the 3T heater cooler remediation plan/adjustment of provision
(E) Legal expenses related to 3T, other minor litigations and Caisson acquisition
(F) Includes $3.7M related to SG&A, $0.1M related to R&D, and less than $0.1M related to COGS
(G) Relates to the impact of restructuring initiatives, including IP migration

* Numbers may not add due to rounding

GAAP to Non-GAAP Reconciliations

U.S. dollars in millions, except per share amounts

Three Months Ended March 31, 2016	Sales	Gross Profit	Income from Operations	Net Income (Loss)	Diluted EPS
GAAP Financial Measures	$287.0	$162.7	($36.1)	($40.4)	($0.83)
Specified Items					
Merger and integration expense (A)			6.8	5.9	0.12
Restructuring expense (B)			28.6	26.8	0.55
Amortization of intangible assets (C)			15.9	10.9	0.22
3T product remediation (D)		0.7	0.7	0.6	0.01
Other Income Expenses & Litigations (E)			0.3	0.3	0.01
Impact of inventory step-up (F)		21.3	21.3	14.6	0.30
Equity compensation (G)		0.4	6.1	5.3	0.11
Certain tax adjustments (H)				2.5	0.05
Adjusted financial measures	$287.0	$185.1	$43.5	$26.5	$0.54

GAAP results for the three months ended March 31, 2016 include:

(A) Expense related to merger and integration activities
(B) Restructuring expenses, severance related to CRM R&D restructuring plan, Corporate and shared-service synergies and recent organizational changes
(C) Includes depreciation and amortization associated with final purchase price accounting
(D) Cost related to the 3T heater cooler remediation plan
(E) Litigation from legacy companies
(F) Includes amortization of inventory step-up associated with final purchase price accounting
(G) Includes $5.4M related to SG&A, $0.3M related to R&D, and $0.4M related to COGS
(H) Relates to the impact of restructuring initiatives, including IP migration
(I) Expense related to merger and integration activities

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* Numbers may not add due to rounding

GAAP to Non-GAAP Reconciliations

The preceding tables reconcile the most comparable U.S. Generally Accepted Accounting Principles (GAAP) measures to the non-GAAP financial and operating measures presented in LivaNova's second-quarter 2016 press release and during the conference call held in conjunction with the announcement of second-quarter 2016 results.

LivaNova uses various non-GAAP financial measures including, among others, net sales on a constant-currency basis, adjusted gross profit, adjusted operating margin, adjusted net income and adjusted diluted earnings per share. These non-GAAP measures adjust for certain specified items that are described in the press release and attached schedules. LivaNova's management believes that these non-GAAP financial measures facilitate a more complete analysis and greater transparency into LivaNova's ongoing results of operations, particularly in comparing underlying results from period to period. Management uses these non-GAAP financial measures internally in financial planning to monitor business unit performance and in evaluating management performance. All non-GAAP financial measures are intended to supplement the applicable GAAP measures and should not be considered in isolation from, or a replacement for, financial measures prepared in accordance with GAAP.

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