

First Quarter 2020 Earnings Performance

April 29, 2020



Safe Harbor

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

Intellectual Property

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

Trademarks for our Neuromodulation systems the VNS Therapy[®] System, the VITARIA[®] System and our proprietary pulse generator products: Model 102 (Pulse[®]), Model 102R (Pulse Duo[®]), Model 103 (Demipulse[®]), Model 104 (Demipulse Duo[®]), Model 105 (AspireHC[®]), Model 106 (AspireSR[®]) and Model 1000 (SenTiva[®]) and Model 8103 (Symmetry[®]).

Trademarks for our Cardiopulmonary products and systems: S5[®] heart-lung machine, S3[®] heart-lung machine, Inspire[®], Heartlink[®], XTRA[®] Autotransfusion System, 3T Heater-Cooler[®], Connect[™] and Revolution[®].

Trademarks for our line of surgical tissue and mechanical heart valve replacements and repair products: Mitroflow[®], Crown PRT[®], Solo Smart[™], Perceval[®], Miami Instruments[™], Top Hat[®], Reduced Series Aortic Valves[™], Carbomedics Carbo-Seal[®], Carbo-Seal Valsalva[®], Carbomedics Standard[®], Orbis[™] and Optiform[®], and Mitral valve repair products: Memo 3D[®], Memo 3D ReChord[™], Memo 4D[®], AnnuloFlo[®], AnnuloFlex[®], Bicarbon Slimline[™], Bicarbon Filtline[™] and Bicarbon Overline[™].

Trademarks for our extracorporeal life support systems: TandemLife[®], TandemHeart[®], TandemLung[®], ProtekDuo[®], and LifeSPARC[™].

Trademarks for our obstructive sleep apnea system: ImThera[®] and Aura6000[®].

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

Agenda

1Q 2020 Highlights

Financial Results

Guidance

Summary

1Q 2020 Highlights

1Q 2020 Highlights

Meaningful innovation and execution to deliver results

Cardiopulmonary

- The FDA granted permission to use several cardiovascular products in the U.S. for ECMO therapy greater than six hours to temporarily expand the availability of devices to address COVID-19. Products include:

S5[®] heart-lung machine

Inspire[®] family of oxygenators

TandemHeart[®] pump and controller

EasyFlow[™] Aortic Cannula

CP5[®] centrifugal pump driver

EOS[®] PMP oxygenator

TandemLung[®] oxygenator

RAP[™] Femoral Venus Cannula

Revolution[®] centrifugal pump

LifeSPARC[™] pump and controller

ProtekDuo[®] cannula

- The Bi-Flow cannula earned CE Mark approval. This cannula is designed to reduce the risk of limb ischemia, a significant and all-too-common complication from ECMO therapy.

Difficult-to-Treat Depression (DTD)

- Verily and LivaNova entered into a research collaboration to capture data on patient behavior using technology and analytics as part of our RECOVER depression clinical study. These data will provide further insights into depressive episodes and a DTD patients' response to Vagus Nerve Stimulation Therapy (VNS Therapy) impact on DTD.

Autonomic Regulation Therapy (ART)

- Two posters were presented at the ACC and World Congress of Cardiology meeting. The presentations reviewed the benefits of ART for heart failure patients. They further support the rationale for the ANTHEM-HFrEF heart failure pivotal study by reporting long-term improvement in autonomic tone, baroreceptor sensitivity and cardiac electrical stability produced by VNS to deliver ART.

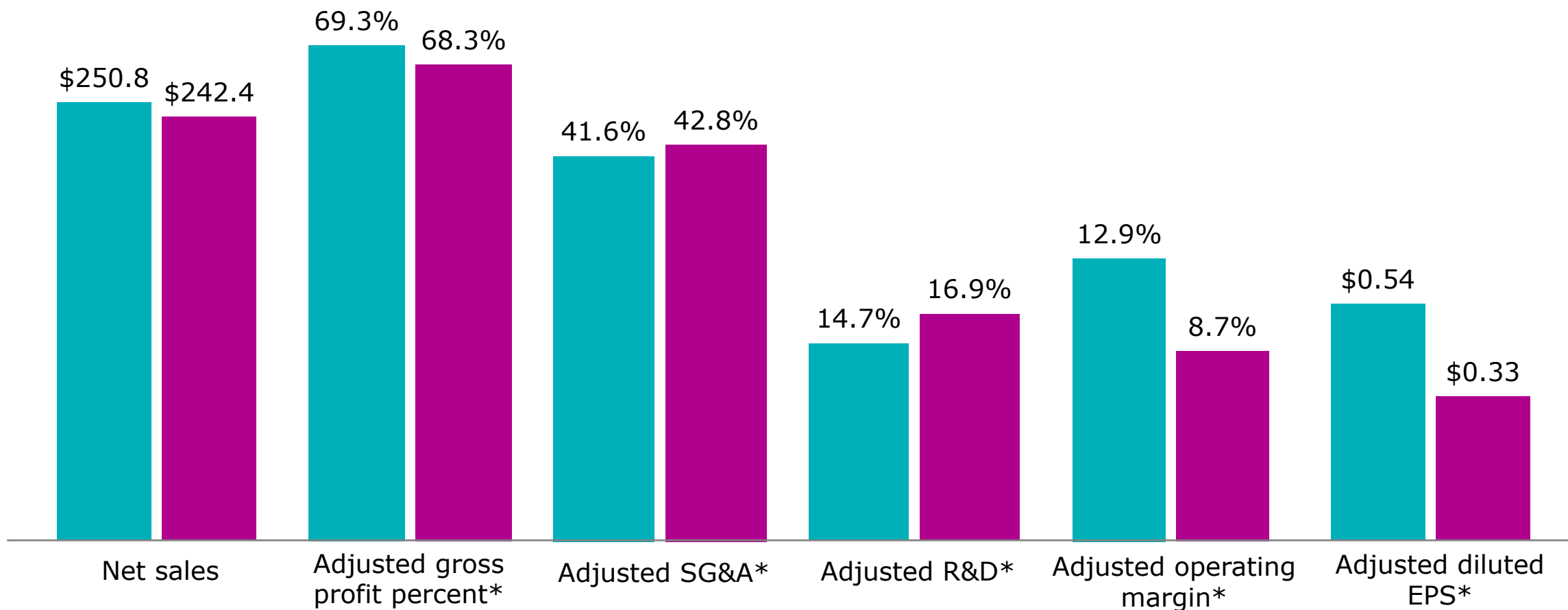
Financing

- Earlier this week, LivaNova disclosed debt covenant amendments, which include adjustments to covenant calculations, and updates for certain limits on ratios of debt to EBITDA and EBITDA to net interest payable. These amended agreements provide LivaNova additional assurance and flexibility to better manage the business through the pandemic.

Financial Results

1Q 2020 Financial Summary

1Q19 1Q20



1Q 2020 Net Sales

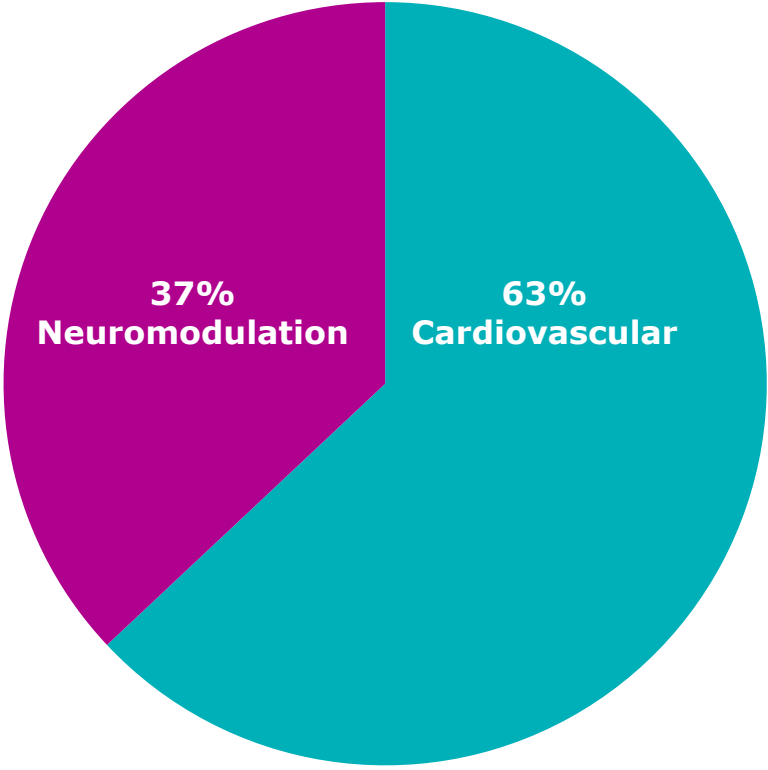
Vagus Nerve Stimulation Therapy (VNS Therapy)

Drug-Resistant Epilepsy (DRE)
 Difficult-to-Treat Depression (DTD)
 Heart Failure (HF)

Hypoglossal Nerve Stimulation Therapy (HGNS Therapy)

Obstructive Sleep Apnea (OSA)

\$242M
1.8% decrease*



76% Cardiopulmonary (CP)

Heart-lung machines (HLM)
 Oxygenators
 Autotransfusion systems (ATS)
 Cannulae

7% Advanced Circulatory Support (ACS)

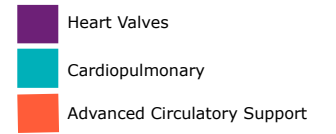
Extracorporeal Life Support (ECLS)
 percutaneous Mechanical Circulatory Support (pMCS)

17% Heart Valves (HV)

Sutureless tissue valves
 Mechanical valves
 Traditional tissue valves
 Annuloplasty rings

Numbers may not add up precisely due to rounding.
 * All percent change performance is shown on a year-over-year constant-currency basis, which is a non-GAAP measure. Constant currency eliminates the effects of foreign currency fluctuations.

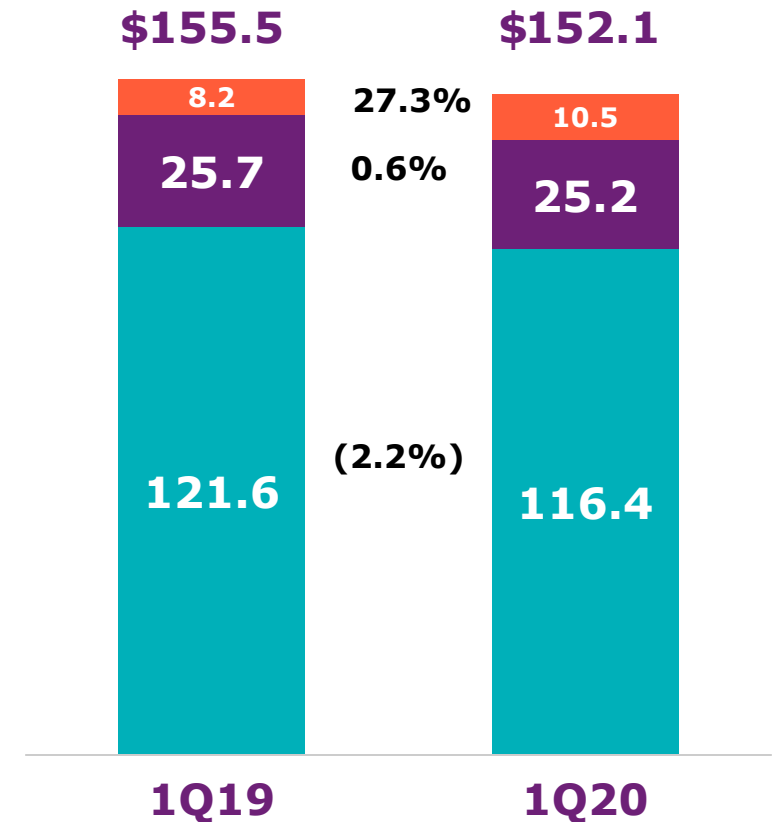
1Q 2020 Cardiovascular Sales



Drivers/Impacts

- + ACS grew 27% related to Protek Duo and TandemLung respiratory support kits
- + Low-single digit oxygenator growth driven by strong performance in the Rest of World region, including South East Asia, Eastern Europe and Brazil
- HLM sales declined in mid-single digits primarily related to strong year-on-year comparison globally
- + Heart Valves benefited from our go-to-market strategy in the Rest of World region and easier comparable versus 1Q 2019

Net Sales (\$M)* (0.2%)



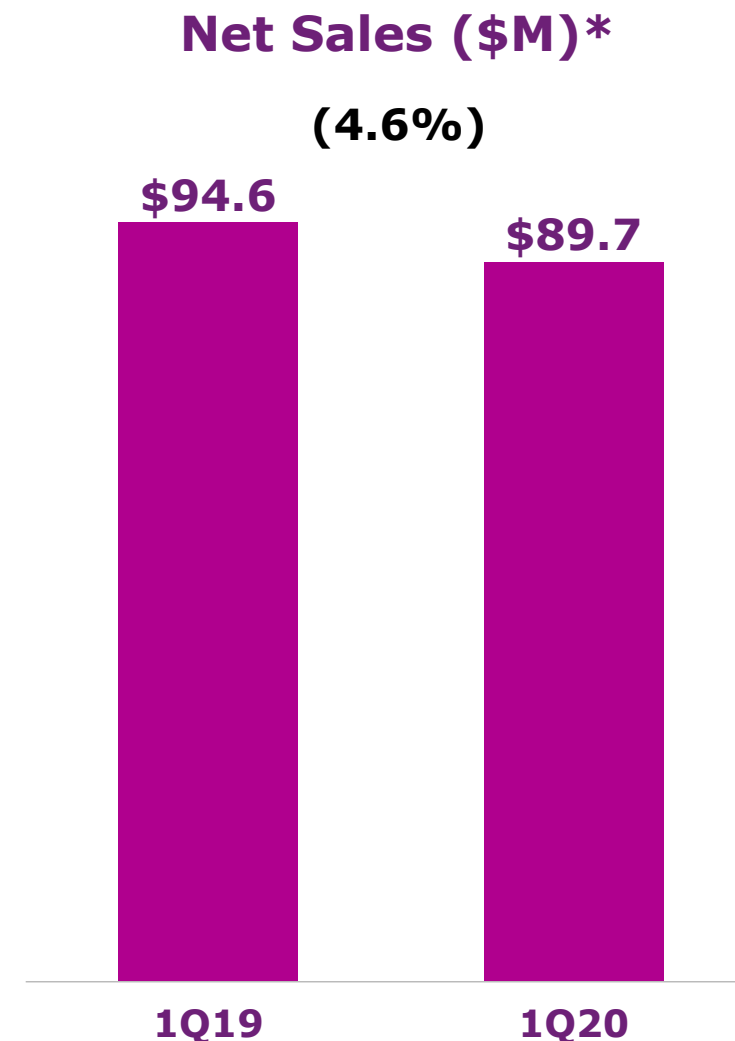
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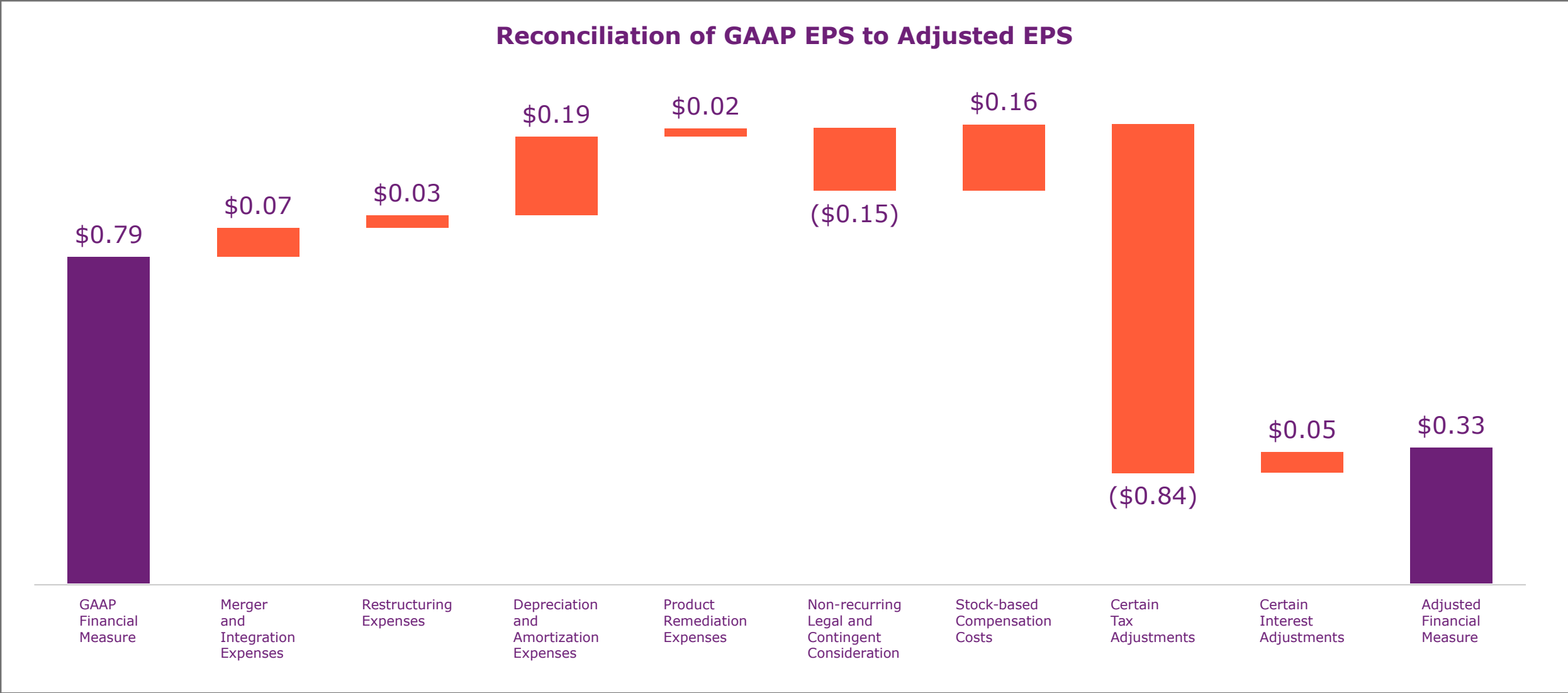
1Q 2020 Neuromodulation Sales

Drivers/Impacts

- All regions were tracking to mid-to-high single digit growth until mid-March when we saw a steep drop in new patient implants related to COVID-19
- + Europe grew 3% led by strong growth in the U.K. and Germany while we saw weakness in Italy related to COVID-19
- The Rest of World region declined 14%, partially offset by strong growth in Brazil driven by our commercial expansion and go-to-market strategy
- + SenTiva VNS Therapy System now 60% of generator sales globally



1Q 2020 Adjusted EPS from Continuing Operations*



* Adjusted diluted EPS is a non-GAAP measure. This non-GAAP measure is reconciled to this GAAP measure in the appendix.

2020 Guidance

Updated Guidance from Continuing Operations

We expect the primary impact of COVID-19 to occur in 2Q 2020

| | Original 2020 | Revised 2020 | 2Q 2020 |
|---|-----------------|-----------------|---------------------|
| Worldwide net sales growth ⁽¹⁾ | 3% - 5% | (17%) - (7%) | (45%) - (30%) |
| Gross profit percent ⁽¹⁾ | 70% - 71% | 66% - 68% | 61.5% - 62.5% |
| R&D ⁽¹⁾ | 14% - 15% | 14.5% - 15.5% | 17.5% - 18.5% |
| SG&A ⁽¹⁾ | 38.5% - 39.5% | 40% - 41% | 49% - 50% |
| Operating margin ⁽¹⁾ | 16.5% - 17.5% | 10.5% - 12.5% | (7%) - (4%) |
| Effective tax rate | 14% - 16% | 10% - 12% | 10% - 12% |
| Diluted EPS ^{(1) (2)} | \$3.10 - \$3.30 | \$1.40 - \$1.70 | (\$0.35) - (\$0.25) |
| Cash flow from operations ⁽³⁾ | \$180M - \$200M | \$80M - \$100M | Not Applicable |

¹ Net sales are on a constant-currency basis. All financial measures are adjusted non-GAAP measures. ² Diluted EPS assumes a share count of approximately 49 million shares. ³ Excludes integration, restructuring and product remediation payments.

Summary

1Q 2020 Summary

FINANCIAL

- 1.8% sales decline related to COVID-19, which started to impact our Rest of World region in mid-February, followed by Europe in early March and the U.S. in mid-March
- 100 basis points gross margin decline from mix of lower Neuromodulation sales related to COVID-19

STRATEGIC

- Difficult-to-treat depression continues to build commercial and clinical capabilities while maintaining engagement with patients and sites during COVID-19
- Supporting physicians and sites remotely while enrollment is temporarily paused for the ANTHEM-HFrEF heart failure pivotal trial

PORTFOLIO

- FDA emergency use authorization to temporarily expand the indication for several of our Cardiovascular products
- Strong growth in Advanced Circulatory Support
- Low-single digit growth in oxygenators

Revised Assumptions for 2020

| | | |
|--|---------------------------------|--|
| REVENUE | 7%-17% Decline | <ul style="list-style-type: none">• COVID-19 to have a pronounced impact on sales in 2Q and the full year• U.S. Epilepsy surgeries expected to see the largest decline in 2Q, improving in 2H• LifeSPARC commercialization expected to deliver at least 30% ACS growth in 2020 |
| EPS | Protection | <ul style="list-style-type: none">• Executed plans at the end of 1Q to reduce spend across the Company• Continued investment in innovation to support Strategic Portfolio Initiatives and long-term value creation |
| CASH GENERATION | Disciplined, Focused Deployment | <ul style="list-style-type: none">• Reduce integration, restructuring expenses and capital spend by more than 50% versus prior year• Manage working capital through various initiatives in AR and inventory |
| STRATEGIC PORTFOLIO INITIATIVES | Continued Execution | <ul style="list-style-type: none">• DTD: Restart enrollment of RECOVER depression study during 3Q with a full-year revenue contribution of \$5-\$10 million• Heart Failure: Enroll 250 patients in the ANTHEM-HFrEF heart failure trial by year-end |

Appendix

Net Sales - Comparison of Actual Results to Constant Currency - *Unaudited*

| <i>\$ in millions</i> | Three months ended March 31, | | % Change | Constant- Currency % Change |
|-------------------------------------|---------------------------------|---------|----------|-----------------------------------|
| | 2020 | 2019 | | |
| Business / Product Line: | | | | |
| <i>Cardiopulmonary</i> | \$116.4 | \$121.6 | (4.3%) | (2.2%) |
| <i>Heart Valves</i> | 25.2 | 25.7 | (1.8%) | 0.6% |
| <i>Advanced Circulatory Support</i> | 10.5 | 8.2 | 27.2% | 27.3% |
| Cardiovascular | 152.1 | 155.5 | (2.2%) | (0.2%) |
| Neuromodulation | 89.7 | 94.6 | (5.3%) | (4.6%) |
| Other | 0.7 | 0.7 | 1.5% | 4.5% |
| Total Net Sales | \$242.4 | \$250.8 | (3.4%) | (1.8%) |

Note: Numbers may not add up precisely due to rounding. Constant-currency percent change is considered a non-GAAP metric.

GAAP to Non-GAAP Reconciliations - *Unaudited*

RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL MEASURES - UNAUDITED (U.S. dollars in millions, except per share amounts)

| Three Months Ended March 31, 2020 | Specified Items | | | | | | | | | | Adjusted Financial Measures |
|---|-------------------------------|--|----------------------------------|--|---|-----------------------------|--|---|-----------------------------------|--|-----------------------------------|
| | GAAP Financial Measures | Merger and Integration Expenses (A) | Restructuring Expenses (B) | Depreciation and Amortization Expenses (C) | Product Remediation Expenses (D) | Acquisition Costs (E) | Non-recurring Legal and Contingent Consideration (F) | Stock-based Compensation Costs (G) | Certain Tax Adjustments (H) | Certain Interest Adjustments (I) | |
| Cost of sales - exclusive of amortization | \$68.9 | \$— | \$— | (\$0.4) | \$— | \$— | \$8.8 | (\$0.6) | \$— | \$— | \$76.7 |
| Product remediation | 1.5 | — | — | — | (1.5) | — | — | — | — | — | — |
| Gross profit percent | 71.0% | —% | —% | 0.2 % | 0.6% | — % | (3.6)% | 0.2 % | —% | —% | 68.3% |
| Selling, general and administrative | \$120.2 | \$— | \$— | \$— | \$— | (\$0.1) | (\$9.0) | (\$7.3) | \$— | \$— | \$103.8 |
| Selling, general and administrative as a percent of net sales | 49.6% | —% | —% | — % | —% | — % | (3.7)% | (3.0)% | —% | —% | 42.8% |
| Research and development | 35.9 | — | — | — | — | — | 6.2 | (1.2) | — | — | 40.9 |
| Research and development as a percent of net sales | 14.8% | —% | —% | — % | —% | — % | 2.5 % | (0.5)% | —% | —% | 16.9% |
| Other operating expenses | 15.3 | (3.5) | (1.6) | (10.3) | — | — | — | — | — | — | — |
| Operating income from continuing operations | 0.6 | 3.5 | 1.6 | 10.7 | 1.5 | 0.1 | (6.0) | 9.0 | — | — | 21.0 |
| Operating margin percent | 0.3% | 1.4% | 0.7% | 4.4 % | 0.6% | — % | (2.5)% | 3.7 % | —% | —% | 8.7% |
| Income tax (benefit) expense | (44.7) | 0.3 | 0.2 | 1.6 | 0.3 | — | 1.4 | 1.0 | 40.9 | 0.5 | 1.4 |
| Net income from continuing operations | 38.6 | 3.2 | 1.4 | 9.2 | 1.2 | 0.1 | (7.4) | 8.0 | (40.9) | 2.6 | 16.0 |
| Diluted EPS - Continuing operations | \$0.79 | \$0.07 | \$0.03 | \$0.19 | \$0.02 | \$— | (\$0.15) | \$0.16 | (\$0.84) | \$0.05 | \$0.33 |

GAAP results for the three months ended March 31, 2020 include:

- (A) Merger and integration expenses related to our legacy companies and recent acquisitions
- (B) Restructuring expenses related to organizational changes
- (C) Includes depreciation and amortization associated with purchase price accounting
- (D) Costs related to the 3T Heater-Cooler remediation plan
- (E) Costs related to acquisitions
- (F) Legal expenses primarily related to 3T Heater-Cooler defense, settlements and other matters and remeasurement of contingent consideration related to acquisitions
- (G) Non-cash expenses associated with stock-based compensation costs
- (H) Primarily relates to discrete tax items and the tax impact of intercompany transactions
- (I) Primarily relates to intellectual property migration, interest related to 3T Heater-Cooler matter and other non-recurring impacts to interest expense

* Numbers may not add up precisely due to rounding.

GAAP to Non-GAAP Reconciliations - *Unaudited*

RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL MEASURES - UNAUDITED (U.S. dollars in millions, except per share amounts)

| Three Months Ended March 31, 2019 | Specified Items | | | | | | | | | | Adjusted Financial Measures |
|---|-------------------------------|--|----------------------------------|---|---|-----------------------------|--|---|-----------------------------------|--|-----------------------------------|
| | GAAP Financial Measures | Merger and Integration Expenses (A) | Restructuring Expenses (B) | Depreciation and Amortization Expenses (C) | Product Remediation Expenses (D) | Acquisition Costs (E) | Non-recurring Legal and Contingent Consideration and Other Reserves (F) | Stock-based Compensation Costs (G) | Certain Tax Adjustments (H) | Certain Interest Adjustments (I) | |
| Cost of sales - exclusive of amortization | \$84.3 | \$— | \$— | (\$0.7) | \$— | \$— | (\$6.2) | (\$0.3) | \$— | \$— | \$77.1 |
| Product remediation | 2.9 | — | — | — | (2.9) | — | — | — | — | — | — |
| Gross profit percent | 65.2 % | —% | —% | 0.3 % | 1.2% | — % | 2.5 % | 0.1 % | —% | —% | 69.3% |
| Selling, general and administrative | \$125.7 | \$— | \$— | (\$0.1) | \$— | (\$0.4) | (\$15.4) | (\$5.3) | \$— | \$— | \$104.5 |
| Selling, general and administrative as a percent of net sales | 50.1 % | —% | —% | (0.1)% | —% | (0.2)% | (6.1)% | (2.1)% | —% | —% | 41.6% |
| Research and development | 43.6 | — | — | (0.1) | — | (1.7) | (3.7) | (1.3) | — | — | 36.8 |
| Research and development as a percent of net sales | 17.4 % | —% | —% | — % | —% | (0.7)% | (1.5)% | (0.5)% | —% | —% | 14.7% |
| Other operating expenses | 15.1 | (3.3) | (2.5) | (9.3) | — | — | — | — | — | — | — |
| Operating (loss) income from continuing operations | (20.8) | 3.3 | 2.5 | 10.2 | 2.9 | 2.1 | 25.3 | 6.9 | — | — | 32.5 |
| Operating margin percent | (8.3)% | 1.3% | 1.0% | 4.1 % | 1.2% | 0.8 % | 10.1 % | 2.7 % | —% | —% | 12.9% |
| Income tax (benefit) expense | (6.6) | 0.6 | 0.6 | 2.6 | 0.9 | 0.5 | 7.2 | 1.6 | (2.4) | (0.1) | 4.9 |
| Net (loss) income from continuing operations | (14.8) | 2.6 | 2.0 | 7.6 | 2.0 | 1.6 | 18.1 | 5.3 | 2.4 | (0.2) | 26.6 |
| Diluted EPS - Continuing operations | (\$0.31) | \$0.05 | \$0.04 | \$0.16 | \$0.04 | \$0.03 | \$0.37 | \$0.11 | \$0.05 | \$— | \$0.54 |

GAAP results for the three months ended March 31, 2019 include:

- (A) Merger and integration expenses related to our legacy companies and recent acquisitions
- (B) Restructuring expenses related to organizational changes
- (C) Includes depreciation and amortization associated with purchase price accounting
- (D) Costs related to the 3T Heater-Cooler remediation plan
- (E) Costs related to acquisitions
- (F) Contingent consideration related to acquisitions and legal expenses primarily related to 3T Heater-Cooler defense and other matters
- (G) Non-cash expenses associated with stock-based compensation costs
- (H) Primarily relates to discrete tax items and the tax impact of intercompany transactions
- (I) Primarily relates to intellectual property migration and other non-recurring impacts to interest expense

* Numbers may not add up precisely 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 first-quarter 2020 press release and during the conference call held in conjunction with the announcement of first-quarter 2020 results.

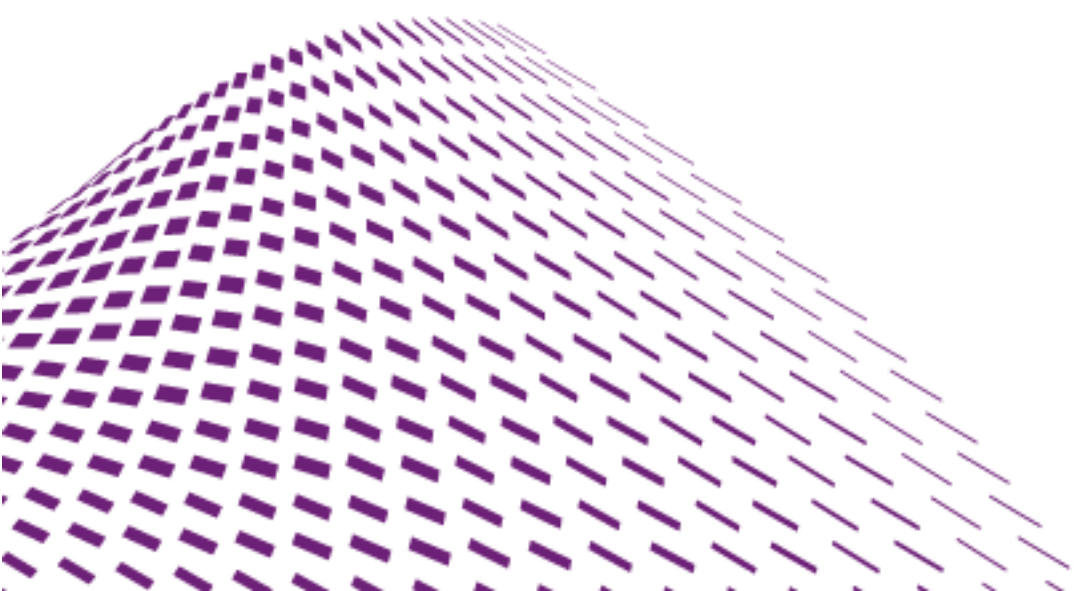
Unless otherwise noted, all sales growth rates in this presentation reflect comparable, constant-currency growth. Management believes that referring to comparable, constant-currency growth is the most useful way to evaluate the sales performance of LivaNova and to compare the sales performance of current periods to prior periods on a consistent basis. Constant-currency growth, a non-GAAP financial measure, measures the change in sales between current and prior-year periods using average exchange rates in effect during the applicable prior-year period.

LivaNova calculates forward-looking non-GAAP financial measures based on internal forecasts that omit certain amounts that would be included in GAAP financial measures. For example, forward-looking net sales growth projections are estimated on a constant-currency basis and exclude the impact of foreign currency fluctuations. Forward-looking non-GAAP adjusted tax rate and adjusted diluted earnings per share guidance exclude other items such as, but not limited to, changes in fair value of contingent consideration arrangements, asset impairment charges and product remediation costs that would be included in comparable GAAP financial measures. The most directly comparable GAAP measure for constant-currency net sales, non-GAAP adjusted tax rate and adjusted diluted earnings per share are net sales, the effective tax rate and earnings per share, respectively. However, non-GAAP financial adjustments on a forward-looking basis are subject to uncertainty and variability as they are dependent on many factors, including but not limited to, the effect of foreign currency exchange fluctuations, impacts from potential acquisitions or divestitures, gains or losses on the potential sale of businesses or other assets, restructuring costs, merger and integration activities, changes in fair value of contingent consideration arrangements, product remediation costs, asset impairment charges and the tax impact of the aforementioned items, tax law changes or other tax matters. Accordingly, reconciliations to the most directly comparable forward-looking GAAP financial measures are not available without unreasonable effort.

The Company also believes adjusted financial measures such as adjusted gross profit; adjusted selling, general and administrative expense; adjusted research and development expense; adjusted other operating expenses; adjusted operating income from continued operations; adjusted income tax expense; adjusted net income from continuing operations; and adjusted diluted earnings per share, are measures by which LivaNova generally uses to facilitate management review of the operational performance of the company, to serve as a basis for strategic planning, and to assist in the design of compensation incentive plans. Furthermore, adjusted financial measures allow investors to evaluate the Company's core performance for different periods on a more comparable and consistent basis, and with other entities in the medical technology industry by adjusting for items that are not related to the ongoing operations of the Company or incurred in the ordinary course of business.

LivaNova

Health innovation that matters



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