

October 25, 2018

Via EDGAR

Office of Electronics and Machinery Division of Corporation Finance U.S. Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549-7010

Re: LivaNova PLC Form 10-K for the Fiscal Year Ended December 31, 2017, Filed February 28, 2018 and Form 8-K filed on August 1, 2018 (File No. 001-37599)

Dear Ladies and Gentlemen:

This letter responds to your letter dated September 18, 2018 (the "Comment Letter") from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") regarding the above listed filings by LivaNova PLC (references to the "Company" or "LivaNova" include LivaNova PLC and its subsidiaries) and two telephonic conversations, on October 15 and October 23, 2018, between representatives of the Staff and the Company.

For your convenience, below we repeat the captions and comments contained in the Comment Letter in bold and we set out our responses thereafter. Each comment is numbered to correspond to the numbers in the Comment Letter. All terms used but not defined herein have the meanings assigned to such terms in the Form 10.1K

Form 8-K filed on August 1, 2018

Exhibit 99.1, page 3

1. We note that you present the forward looking non-GAAP measure adjusted diluted earnings per share without providing the reconciliation to the most directly comparable GAAP financial measure or the statement that providing such reconciliation requires unreasonable efforts. Refer to Item 10(e)(1) (i)(B) of Regulation S-K and the guidance in Question 102.10 of the Compliance and Disclosure Interpretations on Non-GAAP Financial Measures and revise your future filings to provide the required information.

Company Response:

The Company acknowledges the Staff's comment noting that reconciliation to the most directly comparable GAAP financial measure for adjusted diluted earnings per share for 2018, a forward-looking non-GAAP financial measure, is not presented.

In future filings of our Forms 8-K and Exhibits 99.1, we will add the following disclosure:

"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 items above and the tax impact of 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."

2. On pages 13-16 you present the reconciliations of your non-GAAP measures to the most directly comparable GAAP measures in the form of a full non-GAAP income statement, a presentation that gives greater prominence to the non-GAAP measures. Refer to the first bullet point within Question 102.10 of the Compliance and Disclosure Interpretations on Non-GAAP Financial Measures and revise your presentation in future filings accordingly.

Company Response:

The Company acknowledges the Staff's comment. We will revise our future filings and not present a full non-GAAP income statement. Specifically, we will remove any line item not being adjusted and various other line items where the adjustment is less material. Attached hereto, as an example of our approach, are the non-GAAP reconciliations for the three and nine-month periods ended September 30, 2017.

Furthermore, in future filings of our Forms 8-K and Exhibits 99.1, we will enhance our description of why investors will find the non-GAAP measures useful. Please feel free to contact me by telephone at +44 (0) 20 33250660 if you have any questions regarding this correspondence.

Yours sincerely,

/s/ Thad Huston

Thad Huston Chief Financial Officer LivaNova PLC

Cc: Tara Harkins, Securities and Exchange Commission
Lynn Dicker, Securities and Exchange Commission
Christy Adams, Securities and Exchange Commission
Keyna Skeffington, Senior Vice President & General Counsel
Doug Manko, Chief Accounting Officer

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

		Specified Items									
Three Months Ended September 30, 2017	GAAP Financial Measures	Merger & 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)	Adjusted Financial Measures
Gross profit	\$ 161.9			\$ 1.2	\$ 1.6		\$ 0.1	\$ 0.1			\$ 165.0
Selling, general and administrative	97.2			(0.2)	ı		(1.8)	(4.9)			90.3
Research and development	22.9					(1.5)	0.2	(0.4)			21.1
Other operating expenses	11.7	(2.2)	(1.2)	(8.5)	ı		0.2				
Operating income from continuing operations	30.0	2.2	1.2	10.0	1.6	1.5	1.5	5.5			53.5
Income tax expense	1.9	0.1		(0.4)	0.5	0.6	1.5	2.2	6.0	0.2	12.5
Net income from continuing operations	27.0	2.1	1.2	10.5	1.1	0.9		3.3	(6.0)	0.1	40.2
Diluted EPS - Continuing Operations	\$ 0.56	\$ 0.04	\$ 0.02	\$ 0.22	\$ 0.02	\$ 0.02	s —	\$ 0.07	\$ (0.12)	s —	\$ 0.83

GAAP results for the three months ended September 30, 2017 include:

- $(A) \qquad \text{Merger and integration expenses related to our legacy companies} \\$
- (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
- Caisson-related acquisition costs
- Contingent consideration related to acquisitions, legal expenses primarily related to 3T Heater-Cooler defense and other matters (F)
- (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 precisely due to rounding.

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

		Specified Items									_	
Nine Months Ended September 30, 2017	GAAP Financial Measures	Merger & Integration Expenses (A)	Restructuring Expenses (B)	Depreciation and Amortization Expenses (C)	Product Remediation Expenses (D)	Acquisition Costs (E)	Impairment (F)	Non-recurring Legal and Contingent Consideration (G)	Stock-based Compensation Costs (H)	Certain Tax Adjustments (I)	Certain Interest Adjustments (J)	Adjusted Financial Measures
Gross profit	\$ 479.6			\$ 3.3	\$ 2.6	\$ 0.2		\$ 0.1	\$ 0.2			\$ 486.0
Selling, general and administrative	278.8			(0.7)				(7.2)	(12.6)			258.2
Research and development	77.1			(0.1)		(12.4)	1	0.2	(0.9)			64.0
Other operating expenses	46.1	(6.9)	(13.8)	(24.6)		(1.0)	١	0.2				
Operating income from continuing operations	77.5	6.9	13.8	28.7	2.6	13.6		6.9	13.7			163.7
Gain on acquisition of Caisson Interventional, LLC	39.4					(39.4)	١					
Foreign exchange and other gains (losses)	0.9							(3.2)				(2.3)
Income tax expense	10.8	1.2	2.2	7.1	0.8	3.3		3.3	3.6	4.5	0.8	37.6
Losses from equity method investments	(16.5)			0.1			13.0					(3.4)
Net income from continuing operations	85.9	5.7	11.6	21.7	1.8	(29.1)	13.0	0.5	10.1	(4.5)	0.8	117.4
Diluted EPS - Continuing Operations	\$ 1.78	\$ 0.12	\$ 0.24	\$ 0.45	\$ 0.04	\$ (0.60)	\$ 0.27	\$ 0.01	\$ 0.21	\$ (0.09)	\$ 0.02	\$ 2.43

GAAP results for the nine months ended September 30, 2017 include:

- (A) Merger and integration expenses related to our legacy companies
- (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) Caisson-related acquisition costs and gain on acquisition
- Impairment of our equity-method investment in Highlife (F)
- Contingent consideration related to acquisitions, legal expenses primarily related to 3T Heater-Cooler defense, gain on sale of Instituto Europeo di Oncologia S.R.L. and other matters (G)
- (H) Non-cash expenses associated with stock-based compensation costs
- 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 precisely due to rounding.