

September 18, 2018

Thad Huston
Chief Financial Officer
LivaNova PLC
20 Eastbourne Terrace
London, United Kingdom
W2 6LG

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

Dear Mr. Huston:

We have limited our review of your filing to the financial statements and related disclosures and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

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.

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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.

In closing, we remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Tara Harkins at (202) 551-3639 or Lynn Dicker, Senior Accountant, at (202) 551-3616 with any questions.

FirstName LastNameThad Huston
Comapany NameLivaNova PLC

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Sincerely,

Division of

Office of

Electronics and Machinery
FirstName LastName