



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

September 10, 2015

Via E-mail

Gary L. Ellis
Executive Vice President and
Chief Financial Officer
Medtronic Public Limited Company
20 On Hatch, Lower Hatch Street
Dublin 2, Ireland

**Re: Medtronic Public Limited Company
Form 10-K for the fiscal year ended April 24, 2015
Filed June 23, 2015
File No. 001-36820**

Dear Mr. Ellis:

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 10-K for the Fiscal Year Ended April 24, 2015

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Net Income GAAP to Non-GAAP Reconciliation, page 39

1. We note that you present certain non-GAAP measures. In future filings please provide the disclosures required by Item 10(e)(1)(i)(A) and (D) of Regulation S-K for each non-GAAP measure you present.
2. As a related matter, we note you have described the non-GAAP adjustments as unusual or infrequent here and on page 53. Tell us how you were able to determine that all of these adjustments are unusual or infrequent as some of them appear to have occurred in prior periods. Alternatively, revise your disclosure in future filings to properly

characterize your description of these adjustments. Refer to Question 102.03 of the Compliance and Disclosure Interpretations for Non-GAAP Financial Measures which is available at <http://www.sec.gov/divisions/corpfin/guidance/nongaapinterp.htm>.

3. In your presentation of Non-GAAP net income, it appears that you have included a tax effect for each of your non-GAAP adjustments. Please revise future filings to clearly disclose how you calculate the tax effect on the adjustments between GAAP net income and non-GAAP net income. Refer to Question 102.11 of the Compliance and Disclosure Interpretations for non-GAAP Financial Measures.

Income Taxes, page 53

4. We note that you have presented a non-GAAP measure for nominal tax rates. The current reconciliation shown on page 53 does not explain the nature of the reconciling items for each period. Please tell us where you provided the disclosures required by Item 10(e)(1)(i)(B) of Regulation S-K.

Free Cash Flow, page 57

5. We note your disclosure that free cash flow represents the cash available to pursue opportunities to enhance shareholder value. Free cash flow should not be used in a manner that implies that the measure represents the residual cash flow available for discretionary expenditures. Refer to Question 102.07 of the Compliance and Disclosure Interpretations for Non-GAAP Financial Measures. Please revise your future filings accordingly.

Item 8. Financial Statements

Note 6. Fair Value Measurements

Assets and Liabilities That Are Measured at Fair Value on a Nonrecurring Basis, page 91

6. We note that during fiscal year 2015 you began aggregating the components of your Cardiac and Vascular Group and your Restorative Therapies Group into one reporting unit in each group. Please help us better understand how you determined that the aggregated components within your reporting units have similar economic characteristics pursuant to FASB ASC 350-20-35-35.

Note 12. Income Taxes, page 106

7. We note that you provide a reconciliation of your tax expense using the federal statutory rate of the United States on page 108. We also note that you are incorporated in Ireland. Please explain to us why you believe the U.S. tax rate is the appropriate rate for purposes of providing the disclosure required by FASB ASC 740-10-50-12.

Note 18. Segment and Geographic Information

Geographic Information, page 126

8. It appears that revenues and assets attributable to the U.S. are material. In future filings when revenues from external customers attributed to an individual foreign country, or assets in an individual foreign country are material, please disclose those revenues and/or assets separately. Refer to FASB ASC 280-10-50-41.

Form 8-K dated September 3, 2015

Exhibit 99.1

9. On page 4 you state that your non-GAAP comparable, constant currency revenue growth rates are a more useful way to evaluate the underlying performance of your revenues. Please revise this language in future filings to avoid placing undue prominence on your non-GAAP measures. Refer to Instruction 2 to Item 2.02 of Form 8-K and Item 10(e)(1)(i)(A) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Gary L. Ellis
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You may contact Eric Atallah at (202) 551-3663 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. You may also reach me at (202) 551-3671.

Sincerely,

/s/ Martin James

Martin James
Senior Assistant Chief Accountant
Office of Electronics and Machinery