



DIVISION OF  
CORPORATION FINANCE

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

November 22, 2011

Via Email

Mr. Gerhard F. Burbach  
Chief Executive Officer  
Thoratec Corporation  
6035 Stoneridge Drive  
Pleasanton, California 94588

**Re: Thoratec Corporation  
Form 10-K for the Fiscal Year Ended January 1, 2011  
Filed February 23, 2011  
Form 10-Q for the Quarter Ended October 1, 2011  
November 7, 2011  
File No. 000-49798**

Dear Mr. Burbach:

We have reviewed your filing 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 this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended January 1, 2011

Index to Consolidated Financial Statements, page 56

-Consolidated Statement of Cash Flows, page 62

1. We note your presentation of cash flows related to discontinued operations is inconsistent with Topic 230 of the FASB Accounting Standards Codification since your use of the indirect method of determining cash flows from operating activities begins with net

earnings from continuing operations rather than net income. Beginning with the filing of your next Form 10-Q, please revise future filings to appropriately present your consolidated statement of cash flows using the indirect method from operating activities to begin with net income in accordance with paragraph 230-10-45-28 of the FASB Accounting Standards Codification.

Note 1. Operations and Significant Accounting Policies, page 63

-Foreign Currency Translation, page 67

2. We note your disclosure here that you changed your functional currency for your U.K. subsidiary from the U.K. pounds to euros and that this change “did have” a material impact on your consolidated financial statements. We further note your disclosure on page 55 that indicates that this change “did not have” a material impact on your consolidated financial statements. Please clarify for us if the change in your functional currency had a material impact on your financial statements. If the change did have a material impact on your financial statements, please tell us and revise future filings to disclose the impact of the change.

Note 15. Geographic Information, page 94

3. We note disclosure in your Form 8-K dated November 1, 2011 regarding revenues by product line and revenues by category. Please revise future filings to provide the disclosures required by paragraph 280-10-50-40 of the FASB Accounting Standards Codification, or tell us why you do not believe such disclosure is required.

Form 10-Q for the Quarterly Period Ended October 1, 2011

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operation, page 24

Results of Operations, page 27

4. We note your discussion here regarding the increase in revenues. You state that the increase in revenues is due to increased sales of your HeartMate II product as well as sales of CentriMag following your acquisition of Levitronix in August 2011. Please revise future filings to separately quantify the effects of each material factor identified.

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.

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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.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3643 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn  
Accounting Branch Chief