



DIVISION OF
CORPORATION FINANCE

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

December 12, 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
File No. 000-49798**

Dear Mr. Burbach:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings 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. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn
Accounting Branch Chief