

(Registrant's telephone number, including area code)

Not Applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition

On May 1, 2012, Thoratec Corporation (the “Company”) issued a press release announcing its first quarter ended March 31, 2012 results, the text of which is attached hereto as Exhibit 99.1.

The information in this Current Report on Form 8-K, including the exhibit, is furnished pursuant to Item 2.02 and shall not be deemed “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities under that Section. Furthermore, the information in the Current Report on Form 8-K, including the exhibit, shall not be deemed to be incorporated by reference into the filings of the Company under the Securities Act of 1933, as amended.

Item 9.01 Financial Statements and Exhibits

(c) Exhibits

No. Exhibit

99.1 Press Release, dated May 1, 2012, regarding results for the first quarter ended March 31, 2012.

Signature

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated as of May 1, 2012

THORATEC CORPORATION

By: /s/ Gerhard F. Burbach
Gerhard F. Burbach
President and Chief Executive Officer

EXHIBIT INDEX

Exhibit No. Description

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