



DIVISION OF
CORPORATION FINANCE

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

August 10, 2010

Robert D. Hansen
Co-Founder, Chairman and Chief Executive Officer
Electromed, Inc.
500 Sixth Avenue NW
New Prague, Minnesota 56071

**Re: Electromed, Inc.
Registration Statement on Form S-1
Amendment filed July 22, 2010
File No. 333-166470**

Dear Mr. Hansen:

We have reviewed your amended registration statement and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe the amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to our comment, we may have additional comments.

Management's Discussion and Analysis

Nine Months Ended March 31, 2010 Compared to Nine Months Ended March 31, 2009, page 36

1. We note the decreases in operating income and net income for the nine month period ended March 31, 2010 as compared to the nine month period ended March 31, 2009. Please expand your disclosure to explain clearly to investors the reasons for the decline in your operating and net income for the periods presented. Also disclose any known material trends affecting your operating and net income for the periods presented. Refer to Item 303(b) 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 Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of

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all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the Company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Ruairi Regan at (202) 551-3269 or Tim Buchmiller, senior attorney, at (202) 551-3635 with any questions.

Sincerely,

Larry Spigel
Assistant Director

cc (by facsimile): Ryan C. Brauer, Esq.
Elizabeth M. Dunshee, Esq.