



DIVISION OF
CORPORATION FINANCE

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

June 29, 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 June 17, 2010
File No. 333-166470**

Dear Mr. Hansen:

We have reviewed your amended registration statement and supplemental response 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 by amending your registration statement and providing the requested information. If you do not believe our comments apply 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 these comments, we may have additional comments.

Use of Proceeds, page 25

1. We note your changes in response to prior comment 9. It remains unclear what changes in your business plan would trigger a modification in the use of proceeds. Provide a specific discussion of all contingencies that would trigger a change in your use of proceeds. Also address the alternatives to such use as required by Instruction 7 of Item 504 of Regulation S-K.

Capitalization, page 26

2. We refer to your response to prior comment 11. However, cash and cash equivalents should not be included in the capitalization information in the table on page 26. Please revise.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies and Estimates, page 29

3. We refer to your response to prior comment 19. We see once you have determined that a customer is no longer receiving third-party reimbursement and has discontinued payments, you write-off any existing receivable or cease recognizing revenue under the installment method. Additionally, you indicate that under no condition is product returned to you for a price reduction.
 - Please tell us if your sales arrangements could result in individual sales with significantly varying margins. We note your consistent gross margin of 73% to 75% for the periods presented in your financial statements.
 - Provide us the amount of selling price adjustments you accrued for each of the periods presented in your financial statements.
 - Please tell us whether you receive product returns for reasons other than a price reduction. If you do receive product returns, also indicate if you resell returned products or utilize the equipment for other purposes, such as demonstration.
 - Please tell us whether the product has any significant value at the time you write-off the receivable. If there is any significant value tell us why the product would not be returned.

Business, page 36

International Marketing, page 46

4. Please identify the principal countries, other than the United States and Canada, where you sell your products. Also, identify the locations of your principal distributors.

Management, page 58

5. Please clarify the nature of Thomas Hagedorn's responsibilities during the past five years with the entities you have named.

Financial Statements

Note 2. Inventories, page F-12

6. We refer to your response to prior comment 54. Please tell us why you include replacement parts as current assets since you have indicated that there is minimal movement in this inventory.

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 refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Leigh Ann Schultz at (202) 551-3628 or me at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan at (202) 551-3269 or Tim Buchmiller, senior attorney, at (202) 551-3635 with any other questions.

Sincerely,

Brian Cascio
Accounting Branch Chief

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