



DIVISION OF  
CORPORATION FINANCE

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

January 19, 2011

Andrew L. Pearlman  
President and Chief Executive Officer  
Medgenics, Inc.  
8000 Towers Crescent Drive, Suite 1300  
Vienna, VA 22182

**Re: Medgenics, Inc.  
Amendment No. 2 to Registration Statement on Form S-1  
Filed January 11, 2011  
File No. 333-170425**

Dear Dr. Pearlman:

We have reviewed your amended registration statement and response letter, each filed January 11, 2011, 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 an 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.

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

Liquidity and Capital Resources

Sources of Liquidity, page 39

1. Please refer to your response to our prior comment five and your revised disclosures. Please revise your disclosure to include the information from your response that the Board of Directors has not definitely decided to repeal the bylaw provision after the closing of the offering.

Notes to Financial Statements

Note 10:- Convertible Debentures, page F-45

2. We acknowledge your revised disclosure provided in response to our previous comment 16. You are under no obligation to disclose FASB Accounting Standards Codification references in your filing. However, to the extent you elect to disclose specific references please revise your disclosure to accurately reflect the appropriate Codification references. In this regard, it appears that you incorrectly disclose the “ASC 815-40-15-7I” reference as “ASC 815-40-15-71” on page 43 and “ASC 815-40-15-17” on pages F-47 and F-48.

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

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 Vanessa Robertson at (202) 551-3649 or Mark Brunhofer at (202) 551-3638 if you have questions regarding comments on the financial statements and related matters. Please contact Karen Ubell at (202) 551-3873, Dan Greenspan at (202) 551-3623 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler  
Assistant Director

cc: Gretchen Anne Trofa, Esq.  
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