



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

DIVISION OF  
CORPORATION FINANCE

October 18, 2012

Via E-mail

Peter Levy  
Chief Operating Officer  
MYOS Corporation  
45 Horsehill Road, Suite 106  
Cedar Knolls, New Jersey 07927

**Re: MYOS Corporation  
Amendment No. 3 to Registration Statement on Form S-1  
Filed October 11, 2012  
File No. 333-183098**

Dear Mr. Levy:

We have reviewed your amended registration statement and letter dated October 11, 2012, and we 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.

Amendment No. 3 to Registration Statement on Form S-1

General

1. Please ensure that you provide updated disclosure with each amendment. As an example only, we note that you provide beneficial ownership as of September 20, 2012.

Business, page 21

2. We note your responses to comments five and one in our letters dated September 11, 2012 and October 3, 2012, respectively, and reissue the comments in part. Please provide support for your statements that:

- “MYO-T12 is the only clinically proven supplement available...”;
- “[t]he medical community has increased its focus on muscle health...”;
- the third bullet at page 21;
- the statements made in the fourth full paragraph at page 22; and
- the statements made in the fifth full paragraph at page 22.

We note that the supplemental material you provided to us does not appear to support these statements. To the extent that you retain these statements and believe that such supplemental material supports these statements, please provide an analysis describing in detail the nexus between such material and your statements.

Certain Relationships and Related Transactions, page 31

3. We note your response to comment five in our letter dated October 3, 2012 and we reissue the comment in part. Please provide a detailed analysis as to why you do not need to file Mr. Bernstein’s consulting agreement under Item 601(b)(10)(ii)(A) of Regulation S-K.

Closing Comments

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.

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 Sandra Eisen at (202) 551-3864 or Ethan Horowitz, Branch Chief, at (202) 551-3311 if you have questions regarding comments on the financial statements and related matters. Please contact Sirimal R. Mukerjee at (202) 551-3340 or, in his absence, Norman von Holtendorff at (202) 551-3237 or me at (202) 551-3740 with any other questions.

Sincerely,

/s/ A.N. Parker *for*

H. Roger Schwall  
Assistant Director

cc: Via E-mail  
Stuart Neuhauser  
Ellenoff Grossman & Schole LLP