

MYOS CORPORATION
45 Horsehill Road, Suite 106
Cedar Knolls, New Jersey 07927

September 25, 2012

VIA EDGAR

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, DC 20549
Attn: H. Roger Schwall

Re: MYOS Corporation
Registration Statement on Form S-1
Filed August 17, 2012
File No. 333-183098

Dear Mr. Schwall:

MYOS Corporation, a Nevada corporation (the “**Company**”), hereby electronically transmits its response to the comment letter, dated September 11, 2012, received from the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) regarding the Company’s Registration Statement on Form S-1, as amended (the “**Registration Statement**”) previously filed with the Commission on August 17, 2012. Amendment No. 2 to the Registration Statement (“**Amendment No. 2**”) has been filed with the Commission via EDGAR concurrently with the submission of this response letter reflecting certain changes thereto requested by the Staff as well as updating changes. Four clean and four marked copies of Amendment No. 2 are being sent via overnight courier to Sirimal R. Mukerjee of the Staff.

For your convenience, we have repeated below the Staff’s comments in bold and have followed each comment with the Company’s response. Page references noted herein are to the pages presented in the blacklined version of Amendment No. 2 submitted to the Staff.

General

1. **We note that you have submitted a request for confidential treatment relating to your Distribution Agreement filed as Exhibit 10.5. Please note that we will not be in a position to complete our review of your registration statement until all open issues, including those relating to your confidential treatment request, have been resolved.**

We confirm that we have received the Staff’s letter, dated September 18, 2012, with respect to the confidential treatment request (the “**CTR Letter**”) submitted by the Company regarding the Distribution Agreement. We will respond to the CTR Letter under separate cover.

Prospectus Cover Page

2. **We note your statement that the prospectus relates to the sale or “other disposition” of your common stock. Please revise to describe these dispositions.**

We have revised the cover page of Amendment No. 2 to delete the reference to “other dispositions” of our common stock.

Prospectus Summary, page 1

3. **Please revise your disclosure to discuss in necessary detail the basic features of your MYO-T12 product, any nutritional or therapeutic qualities you claim for it, and evidence concerning its efficacy, or provide a cross-reference to where such discussion may be found (for example a cross reference to your discussion on pages 22 and 23 of the filing).**

We have revised Amendment No. 2 (pages 1 and 22) to provide a cross-reference to the more-detailed disclosure regarding MYO-T12 in the Business section and to provide additional information regarding the nutritional and therapeutic qualities of MYO-T12.

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 17

4. **With regard to the analysis of your operating results, please expand your discussion of general and administrative expenses to quantify the impact of each causal factor identified as causing a change in each period presented. Refer to Item 303(A)(3) of Regulation S-K.**

We have revised Amendment No. 2 (pages 17-18) in response to the Staff’s comment.

Business, page 21

5. **If you retain it, please provide support for the statement that MYO-T12 is a “natural” myostatin inhibitor. In this regard, we note your disclosure at page 9 under “We are prohibited from developing naturally occurring....” In addition, please provide independent third-party support for the bulleted statements at page 21 and the statements at page 22 under “Market Overview.” Please mark the supporting documents you provide to us on a supplemental basis to show precisely the location of each piece of information on which you are relying for the claims you make in your filing. In addition, please tell us whether you commissioned any such third-party research or report.**

We hereby confirm to the Staff that MYO-T12 is a natural myostatin inhibitor as it is manufactured from fertile chicken eggs. While we have disclosed in the “Risk Factors” section that we are prohibited from developing a naturally occurring mammalian follistatin-based myostatin inhibitor, this restriction does not prohibit the Company from manufacturing its products from chicken eggs, which are an avian (and not mammalian) source.

As discussed supplementally with the Staff, we will provide the supporting documents to the Staff under separate cover in connection with the next amendment of the Registration Statement.

6. **We note your statement that the \$700,000 promissory note was paid in full in February 2012. Please revise your disclosure to identify the source of funds used to pay off the note in view of your current assets as of December 31, 2011 and your sources and amounts of revenue since inception.**

We have revised Amendment No. 2 (pages 1 and 21) in response to the Staff's comment.

7. **We note your statements that you have outsourced all manufacturing to a single manufacturer and that you had several consultants providing accounting, business development and "other services." Please provide the basis for not filing as an exhibit any agreement memorializing these arrangements. In addition, please revise to identify such "other services."**

We hereby advise the Staff that we do not have a written agreement with our manufacturer and have disclosed same in the "Risk Factors" section of Amendment No. 2 (page 7). In addition, we do not believe that agreements with our consultants need to be filed as exhibits as they are not material and are entered into by the Company in its ordinary course of business. We have revised Amendment No. 2 (page 24) to clarify the reference to the "other services."

Directors, Executive Officers and Corporate Governance, page 24

8. **Please revise your disclosure to discuss whether and, if so, how members of your Scientific Advisory Board are remunerated. Please also disclose whether such members are retained vis-à-vis an advisory board agreement or other similar agreement. If so, please file as exhibits such agreements.**

We have revised Amendment No. 2 (page 26) in response to the Staff's comment and have filed our form of advisory board agreement as Exhibit 10.6.

Executive Compensation, page 28

9. **Please expand your disclosure to comply fully with Items 402(o), (p) and (r)(3) of Regulation S-K, or explain to us why you believe your disclosure is compliant.**

We have revised Amendment No. 2 (pages 28-29) in response to the Staff's comment. We hereby advise the Staff that none of the Company's named executive officers had outstanding equity awards as of December 31, 2011.

Certain Relationships and Related Transactions, page 31

10. **Please file as an exhibit each of the consulting agreement with Mr. Bernstein and the advisory board agreement with Dr. Colker.**

As noted in our response to comment #8, we have filed our form of advisory board agreement as Exhibit 10.6. We do not believe it is necessary to file the consulting agreement with Mr. Bernstein as it is not a material agreement and it will expire in October 2012.

Exhibits and Financial Statement Schedules, page II-5

11. Please ensure that your exhibit index identifies precisely where an exhibit that is incorporated by reference is located. For example, we note that Exhibit 10.1 refers to your Current Report on Form 8-K filed March 3, 2011 only. Please revise to indicate that such exhibit is filed as Exhibit 10.1 to such Form 8-K.

We have revised Amendment No. 2 (page II-5) in response to the Staff's comment.

Financial Statements

Notes to Consolidated Financial Statements

Note 1 – Nature of Organization and Significant Accounting Policies, page F-9

Revenue Recognition, page F-10

12. We note that you entered into a distribution agreement with Maximum Human Performance ("MHP") in May 2012 and that the majority of your sales revenue for the six month period ended June 30, 2012 was from sales to MHP. Please provide us with your analysis of the guidance per FASB ASC 605-45-45 regarding principal / agent considerations in the context of your distribution agreement with MHP.

We hereby advise the Staff that management reviewed the guidance in FASB ASC 605-45-45 regarding principal / agent considerations relating to the distribution agreement with MHP. In reviewing these considerations, management noted that the Company is responsible for providing the product to MHP as well as the product specifications. In addition, the Company has the general inventory risk with respect to acquiring and providing the product to MHP, including risk of inventory loss during shipment. The Company also has credit risk relating to the amount it bills MHP for the product. Management also noted that the distribution agreement does not limit MHP's selling price for the product. Based on the foregoing, management determined that the revenue related to this agreement should be reported on a gross basis.

Inventories, page F-10

13. Please expand your disclosure to state separately the amounts of major classes of inventory such as finished goods, work in process, raw materials and supplies. Also, please expand your disclosures to describe the nature of the cost elements included in inventory. Refer to Rule 5-02(6)(a) and (b) of Regulation S-X.

We have revised Amendment No. 2 (page F-10) in response to the Staff's comment.

Notes to Interim Consolidated Financial Statements

Note 1 – Nature of Organization and Significant Accounting Policies, page F-27

14. Please include an affirmative statement that your interim financial statements include all adjustments that, in the opinion of management, are necessary in order to make the financial statements not misleading. Refer to Instruction 2 to Rule 8-03 of Regulation S-X.

We have revised Amendment No. 2 (page F-27) in response to the Staff's comment.

Signature, page II-7

15. Please revise your signature page to provide the signatures required by Instruction 1 to the "Signatures" in Form S-1. For example, we note that the registration statement is not signed by your principal financial officer.

We hereby advise the Staff that the Company's principal financial officer previously signed Amendment No. 1 to the Registration Statement on the bottom of page II-7.

* * *

We thank the Staff in advance for its consideration of the enclosed and the foregoing responses. Should you have any questions concerning the foregoing responses, please contact the undersigned or our legal counsel Stuart Neuhauser, Esq. at (212) 370-1300.

Very truly yours,

Peter Levy

/s/ Peter Levy

Enclosures

cc: Ellenoff, Grossman & Schole LLP
Seligson & Giannattasio, LLP