



DIVISION OF  
CORPORATION FINANCE

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

April 7, 2014

Via E-mail

Nevan Elam  
Chief Executive Officer  
AntriaBio, Inc.  
890 Santa Cruz Avenue  
Menlo Park, CA 94025

**Re: AntriaBio, Inc.  
Preliminary Proxy Statement on Schedule 14C  
March 31, 2014  
File No. 000-54495**

Dear Mr. Elam:

We have limited our review of your filing to the issue addressed in the following comment.

Please respond to this letter by amending your filing and providing the requested information. If you do not believe our comment applies 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 filing and the information you provide in response to our comment, we may have additional comments.

Proposal 1

Amendment to the Certificate of Incorporation to Effect a 1 for 6 Reverse Split of the Company's Issued and Outstanding Common Stock, page 4

1. We note your disclosure that, in connection with the Reverse Split, you do not intend to change the number of shares of common stock authorized, resulting in additional authorized but unissued shares that may be issued by your Board of Directors in its discretion. Please disclose whether you currently have, or do not have, any plans with respect to these additional authorized but unissued shares. If such plans exist, please disclose all material information.

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 Exchange Act of 1934 and all applicable Exchange 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.

Nevan Elam  
AntriaBio, Inc.  
April 7, 2014  
Page 2

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Christina De Rosa at (202) 551-3577, Dan Greenspan at (202) 551-3623 or me at (202) 551-3715 with any questions.

Sincerely,

*/s/ Daniel Greenspan for*

Jeffrey P. Riedler  
Assistant Director