

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

October 11, 2017

Nevan Elam Chief Executive Officer AntriaBio, Inc. 1450 Infinite Drive Louisville, CO 80027

Re: AntriaBio, Inc.

Registration Statement on Form S-1

Filed September 22, 2017 File No. 333-220585

Dear Mr. Elam:

We have limited our review of your registration statement to those issues we have addressed in our 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.

Registration Statement on Form S-1

Selling Stockholders, page 27

1. Please revise your disclosure to state the nature of any position, office, or other material relationship between you or an affiliate and any selling security holder within the past three years. As examples only, we note that your director and executive officer Dr. Hoyoung Huh holds the voting power for shares held by pH Pharma Co., Ltd., your director Samir Patel has voting and investment power for the shares held by Pranabio Investments, your director Tae Hoon Kim is the CEO for Aju Pharm Co., and your director David Welch has voting and investment power over the shares held by three of the trusts. Refer to Item 507 of Regulation S-K.

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2. We note that you are incorporating by reference certain documents filed prior to the termination of the offering. Please note that any report filed after the filing date but prior to effectiveness may only be incorporated through the filing of a pre-effective amendment that includes a specific reference to such report. Accordingly, please revise your registration statement to specifically incorporate the Form 8-K you subsequently filed, and when filed, the definitive proxy statement. See Securities Act Forms CD&I 113.05 and Item 12(a)(2) of Form S-1.

General

3. It appears that you are seeking to register this transaction as a resale pursuant to Rule 415(a)(1)(i) of the Securities Act of 1933, as amended. Please provide a detailed legal and factual analysis of why this should not be characterized as an indirect primary offering. In this regard, we note that several of your selling shareholders appear to have material relationships with you and your affiliates, the size of the offering represents a substantial percentage of your outstanding shares held by non-affiliates, and the short period of time between the private placement and the filing of this registration statement. Refer to CD&I Securities Act Rules 612.09.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Dorrie Yale at 202-551-8776 or Suzanne Hayes at 202-551-3675 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Michael L. Weiner