



DIVISION OF  
CORPORATION FINANCE

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

July 10, 2013

Via E-mail

David R. Koos  
Chief Executive Officer  
Bio-Matrix Scientific Group, Inc.  
4700 Spring Street, Suite 304  
LA Mesa, CA 91942

**Re: Bio-Matrix Scientific Group, Inc.  
Amendment No. 2 to Form 10-K for Fiscal Year Ended September 30, 2012  
Amendment No. 1 to Form 10-Q for Fiscal Quarters Ended  
December 31, 2012 and March 31, 2013  
Filed June 21, 2013  
Response dated June 19, 2013  
File No. 0-32201**

Dear Mr. Koos:

We have reviewed your response dated June 19, 2013 and have the following additional comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. The page numbers referenced in the headings to our comments are based on the EDGAR version of the filings.

Please respond to this letter within ten business days by amending your filings, by providing the requested information, or by advising us when you will provide the requested response. 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 filings and the information you provide in response to these comments, we may have additional comments.

Amendment No. 2 to Form 10-K for Fiscal Year Ended September 30, 2012

Report of Independent Registered Public Accounting Firm, page 23

1. We reviewed your response to comment four in our letter dated May 30, 2013. It appears that the date of inception in the first and third paragraphs of the auditor's report still differs from the date of inception disclosed in the fourth paragraph in Note 1 to the financial statements. As previously requested, please revise or advise.

Consolidated Balance Sheet, page 24

2. We reviewed your response to comment eight in our letter dated May 30, 2013. As previously requested, please tell us your basis in GAAP for separately presenting the accumulated equity in losses of subsidiary rather than including the accumulated losses in retained earnings accumulated during the development stage.

Consolidated Statement of Operations, page 25

3. We reviewed your response to comment 10 in our letter dated May 30, 2013. Please tell us how you treated the carrying value of the noncontrolling interest in your computation of the gain on deconsolidation of Entest. Please also tell us why the noncontrolling interest is presented on the balance sheets given the deconsolidation. Please refer to ASC 810-10-40-5(a).
4. As previously requested in comment 12 in our letter dated May 30, 2013, please tell us what other losses attributable to subsidiary classified as other income and expenses represents and why the losses are properly classified.

Consolidated Statements of Stockholders' Equity, page 26

5. We reviewed your response to comment 16 in our letter dated May 30, 2013. Please tell us why your presentation of noncontrolling interest complies with ASC 810-45 and your basis in GAAP for including net income attributable to the noncontrolling interest in retained earnings accumulated during the development stage. In addition, please tell us how adjustments to the carrying amount of noncontrolling interest related to changes in your ownership interest in the subsidiary are reflected in the statement. Please refer to ASC 810-45-50-1A and the example at ASC 810-10-55-4L.

Consolidated Statement of Cash Flows, page 32

6. Your response to comments 17 and 18 in our letter dated May 30, 2013 did not address the portion of our comment related to non-cash charges and credits. Please tell us your basis in GAAP for presenting: (i) the increase in available for sale securities and the decrease in investment in subsidiary in cash flows from financing activities and unrealized losses on available for sale securities in cash flows from operating activities given that these transactions represent non-cash investing activities; (ii) loss on disposal of equipment in cash flows from investing activities given that the charge represents a non-cash charge to income; and (iii) common stock issued pursuant to contractual obligations in cash flows from financing activities given that the charge represents a non-cash charge to income. Please refer to the guidance in ASC 230.

David R. Koos  
Bio-Matrix Scientific Group, Inc.  
July 10, 2013  
Page 3

Amendment No. 1 to Forms 10-Q for Fiscal Quarters Ended December 31, 2012 and March 31, 2013

Exhibits 31.1 and 31.2

7. Please remove the title of the certifying individual in the introductory paragraph. Refer to the form of certification in Item 601(b)(31)(i) of Regulation S-K.
8. Please revise paragraphs 4 and 5 of the certifications to conform exactly to the language in the certification in Item 601(b)(31)(i) of Regulation S-K.

You may contact Yolanda Guobadia, Staff Accountant, at (202) 551-3562 or me at (202) 551-3344 if you have questions regarding our comments or any other questions.

Sincerely,

/s/ William H. Thompson

William H. Thompson  
Accounting Branch Chief