



DIVISION OF
CORPORATION FINANCE

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

August 20, 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. 3 to Form 10-K for Fiscal Year Ended September 30, 2012
Amendment No. 2 to Form 10-Q for Fiscal Quarters Ended
December 31, 2012 and March 31, 2013
Filed July 31, 2013
Response dated July 31, 2013
File No. 0-32201**

Dear Mr. Koos:

We have reviewed your response dated July 31, 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. 3 to Form 10-K for Fiscal Year Ended September 30, 2012

Report of Independent Registered Public Accounting Firm, page 7

1. We reviewed your response to comment number 1 in our letter dated July 10, 2013 and the revisions to your disclosure. We understand that your date of inception is October 6, 1998. Please tell us why:

- the date of inception in the audit report of John Kinross-Kennedy's report is August 2, 2005;
- the report complies with generally accepted auditing standards given that John Kinross-Kennedy did not audit the period from October 6, 1998 to August 2, 2005;
- why the report refers to the period from inception to September 30, 2011 when the statements of operations and cash flows for that period are not included in the financial statements and given that the statements of operations and cash flows prior to September 30, 2007 were audited by other independent registered public accounting firms; and
- the report was not revised to omit references to the period from inception to September 30, 2011 given that the statements of operations and cash flows for the period from inception to September 30, 2011 are not included in the financial statements.

Consolidated Statement of Operations, page 11

2. We reviewed your response to comment number 3 in our letter dated July 10, 2013 and the revisions to your disclosure. As a result of the deconsolidation of Entest, you removed noncontrolling interest from the balance sheet included in Amendment No. 3 to Form 10-K for fiscal year ended September 30, 2012. The balance sheets included in Amendment No. 2 to Form 10-Q for the quarter ended March 31, 2013 still reflects a line item for the deficit attributable to noncontrolling interest. However, it appears that the amounts presented as total stockholders' deficit in the balance sheets included in Amendment No. 2 to Form 10-Q for the quarter ended March 31, 2013 do not include the amounts reflected in the deficit attributable to noncontrolling interest line item, and that the line item should be removed from the statements. Please revise or advise.

Consolidated Statement of Cash Flows, page 18

3. We reviewed your response to comment number 6 in our letter dated July 10, 2013 and we do not believe that the statement has been prepared in accordance with the guidance in ASC 230. Specifically, we note the following:
 - The gain on deconsolidation of Entest BioMedical, Inc. recognized in fiscal 2011 should be presented as an adjustment to reconcile net income or loss to net cash used in or provided by operating activities and the assets and liabilities derecognized and the noncash increase in the investment in Entest should be presented in supplemental disclosures of noncash investing and financing activities since deconsolidation did not result in cash receipts or payments; and

- The decrease in other comprehensive income presented in cash flows from operating activities and the decreases in securities available for sale and the investment in subsidiary presented in cash flows from financing activities as a result of the change in classification of the investment in Entest recognized in fiscal 2012 should not be included in the statement since the reclassification did not result in cash receipts or payments.

Please refer to ASC 230-10-45-1 and 230-10-50-3 and either tell us why the noncash transactions resulted in cash receipts or payments that should be presented in the statements and the basis in GAAP for the classifications of the transactions in the statements or correct the errors by restating the statements to comply with ASC 230 and report the error corrections in accordance with ASC 250.

In addition, it appears that the statements of cash flows in your quarterly reports on Form 10-Q for the first three quarters of fiscal 2013 include similar noncash transactions and noncash financing transactions related to extinguishments of liabilities. If the errors in the quarterly reports are material to operating, investing and/or financing cash flows, please also correct the errors by restating the statements to comply with ASC 230 and report the error corrections in accordance with ASC 250. If you believe noncash transactions included in the statements of cash flows in any of the quarterly reports are not material to operating, investing and/or financing cash flows please provide your materiality analysis pursuant to ASC 250-10-S99 for any of such quarters.

Amendment No. 2 to Form 10-Q for Fiscal Quarters Ended December 31, 2012 and March 31, 2013

Exhibits 31.1 and 31.2

4. We reviewed your response to comment number 7 in our letter dated July 10, 2013 and the revisions to your certifications. Please revise to identify the name of the registrant in the first paragraph. Please refer to the form of certification in Item 601(b)(31)(i) of Regulation S-K.
5. We reviewed your response to comment number 8 and the revisions to paragraphs 4 and 5 of the certifications. It appears that paragraph 4 of the certifications still do not conform exactly to the language in the certification in Item 601(b)(31)(i) of Regulation S-K. Also, paragraph 5 in the certifications included as exhibits to Form 10-Q for the quarter ended March 31, 2013 still does not conform exactly to the language in the certification in Item 601(b)(31)(i) of Regulation S-K. Please revise as previously requested.

David R. Koos
Bio-Matrix Scientific Group, Inc.
August 20, 2013
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You may contact Yolanda Guobadia, Staff Accountant, at (202) 551-3562 or me at (202) 551-3344 if you have questions regarding our comment or any other questions.

Sincerely,

/s/ William H. Thompson

William H. Thompson
Accounting Branch Chief