

Via Facsimile and U.S. Mail
Mail Stop 4720

October 23, 2009

John J. Cousins
President
Biomoda, Inc.
P.O. Box 11342
Albuquerque, New Mexico 87192

Re: Biomoda, Inc.
Form 10-K for fiscal year ended December 31, 2008
Filed on March 31, 2009
Form 10-Q for the quarterly period ended March 31, 2009
Filed on May 14, 2009
Form 10-Q for the quarterly period ended June 30, 2009
Filed on August 14, 2009
File No. 333-90738

Dear Mr. Cousins:

We have reviewed your filings and have the following comment. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In our comment, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended December 31, 2008

Exhibit 31

1. Please revise your certifications provided in your 2008 Form 10-K and your 2009 Forms 10-Q to be worded exactly as required by Item 601(b)(31) of Regulation S-K. In this regard, address the following items:
 - a. Remove the report descriptions “annual” and “quarterly,” as appropriate, from all certifications except for the first paragraph;
 - b. Revise paragraphs 4 and 5 of the certification to include the phrase "The registrant's other certifying officer(s)" which may be singular when only one person is certifying a registrant's periodic report;
 - c. Revise to include the entire introductory language of paragraph 4 which also addresses your officers' responsibility for establishing and maintaining internal control over financial reporting;
 - d. Cite the correct Exchange Act Rules when referring to disclosure controls and procedures and internal control over financial reporting;
 - e. Include the language “(the registrant's fourth fiscal quarter in case of an annual report)” in paragraph 4(d); and,
 - f. Remove the name of the registrant at the end of the certification.

* * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your response to our comment and provides the requested information. Detailed letters greatly facilitate our review. You should furnish the letter to us via EDGAR under the form type label CORRESP.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

In connection with responding to our comment, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- 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

John J. Cousins
Biomoda, Inc.
October 23, 2009
Page 3

- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Donald Abbott, Senior Staff Accountant, at (202) 551-3608 if you have questions regarding the comment. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant