

Mail Stop 4720

April 19, 2010

Mr. John J. Cousins
President
Biomoda, Inc.
P.O. Box 11342
Albuquerque, NM 87192

**Re: Biomoda, Inc.
Registration Statement on Form S-1
Filed April 9, 2010
File Number 333-165966**

Dear Mr. Cousins:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

Form S-1

1. We note your disclosure in the company's Form 10-K for the Fiscal Year Ended December 31, 2009 that management concluded that your internal control over financial reporting was not effective as of December 31, 2009.

Please amend your Form 10-K for the Fiscal Year Ended December 31, 2009 to provide additional information regarding your internal controls and procedures in compliance with Item 308 of Regulation S-K. Specifically, please disclose whether there were any material weaknesses related to the policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect your transactions and dispositions of your assets;
- Provide reasonable assurance that your receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and

- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.
2. In addition, please expand your disclosure to discuss the steps that you are undertaking to improve your internal controls, including a detailed description of the steps being undertaken to address each of the material weaknesses and significant deficiencies identified by your auditors. Please also disclose the specific improvements you intend to make to your periodic financial statement close process.

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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert this action 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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

Mr. John J. Cousins
Biomoda, Inc.
April 19, 2010
Page 3

Please contact Rose Zukin at (202) 551-3239 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: Thomas A. Rose, Esq.
James M. Turner, Esq.
Sichenzia Ross Friedman Ference LLP
61 Broadway, 32nd Flr.
New York, NY 10006