



DIVISION OF
CORPORATION FINANCE

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

February 1, 2012

Via E-mail

Mr. Irach Taraporewala, Ph.D.
Chief Executive Officer and President
Ohr Pharmaceutical, Inc.
489 5th Avenue, 28th Floor
New York, NY 10017

**Re: Ohr Pharmaceutical, Inc.
Form 10-K for the Fiscal Year Ended September 30, 2011
Filed on January 13, 2012 and amended on January 18, 2012
File No. 333-88480**

Dear Dr. Taraporewala:

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 document.

Please respond to this letter within 10 business days by amending your filing, by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may raise additional comments.

Item 9A. Controls and Procedures, page 42

1. Please amend your filing to include your conclusion regarding the effectiveness of disclosure controls and procedures at September 30, 2011 as required by Item 307 of Regulation S-K. To the extent that you believe your disclosure controls and procedures will be effective in spite of your ineffective conclusion on internal control over financial reporting, please provide us draft disclosure detailing your conclusion prior to filing your amendment.

Signatures, page 51

2. Please amend your filing to include the signatures of all individuals as required by General Instruction D(2) of Form 10-K. In this regard, in addition to your Chairman of

the Board and your Chief Executive Officer, please have the following additional individuals sign your filing:

- your Chief Financial Officer;
- your controller or principal accounting officer; and
- your other member of your Board of Directors to constitute the majority of your Board.

To the extent that any person occupies more than one of the specified positions, please indicate each capacity in which he signs the report.

Exhibits 31: Certifications

3. Please amend your filing to revise your certifications to provide the wording exactly as prescribed by Item 601(b)(31) of Regulation S-K. In this regard, please:
 - revise the introductory sentence to certification number four to include your responsibilities regarding internal control over financial reporting;
 - revise the introductory sentence to certification number four to include both rule references where disclosure controls and procedures are defined; and
 - revise your fourth certification to add paragraph “b” regarding your internal control over financial reporting.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written statement from the company acknowledging that:

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

Please contact Mark Brunhofer, Staff Accountant, at (202) 551-3638 or Gus Rodriguez, Accounting Branch Chief, at (202) 551-3752, if you have questions regarding the comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant