April 2, 2015

Securities and Exchange Commission
Division of Corporate Finance
Washington, DC 20549

Attention: Jim Rosenberg
Senior Assistant Chief Accountant

Re: Ohr Pharmaceutical, Inc.
Form 10-K for the Fiscal Year Ended September 30, 2014 (the "Form 10-K")
Filed December 22, 2014
File No. 001-35963

Greetings:

We are in receipt of the Staff's letter of comment, dated March 18, 2015, and, on behalf of Ohr Pharmaceutical, Inc. ("Ohr" or the "Company"), have the responses set forth below.

Please be advised that the following responses correspond to the numbered paragraphs 1-10 (in bold) in the Staff's letter.

Business, page 1

1. We note your reference to various agreements which appear material to your business relating to your preclinical research and product development. Please amend your disclosure to discuss the material terms of the:

- **joint venture agreement with Cold Spring Harbor Laboratory;**
- **research agreement with Alcon Research;**
- **research and license agreement with EyeCro; and**
- **various license rights acquired from SKS Ocular, LLC and SKS Ocular 1, LLC.**

In your description of these agreements you should specifically identify:

- **Nature and scope of intellectual property transferred if the agreement involves a license;**

- **Each parties rights and obligations;**
- **Duration of agreement and royalty term;**
- **Termination provisions;**
- **Investment features or share purchases;**
- **Payment provisions which may include the following:**
  - **Up-front or execution payments received or paid**
  - **Aggregate amounts paid or received to date under agreement;**
  - **Aggregate future potential milestone payments to be paid or received**
  - **Royalty rates**
  - **Profit or revenue-sharing provisions**

In addition, please file each agreement as an exhibit to your registration statement as required under Item 601(b)(10) of Regulation S-K. Alternatively, please provide a reasonably detailed analysis supporting your conclusion that they need not be filed.

Response:

- **Joint venture agreement with Cold Spring Harbor Laboratory ("CSHL")**

As of September 30, 2014, Ohr and CSHL each owned 50% of the Common Stock of DepYmed, Inc. ("DepYmed"). Ohr does not and did not at any time control DepYmed. Since September 30, 2014, DepYmed hired an executive (not affiliated with Ohr) who received equity, further reducing Ohr's ownership. DepYmed was organized to develop trodusquemine, which was acquired by Ohr as part of a purchase of assets for $200,000 in 2009. Trodusquemine was one of two clinical stage assets and dozens of preclinical molecules that were part of the 2009 acquisition. Ohr has invested less than an aggregate of $200,000 in DepYmed after its formation (including the value of rights to trodusquemine and trodusquemine materials contributed to DepYmed) and has no further obligation to contribute to DepYmed. The agreements relating to DepYmed are not material to Ohr's current business, are confidential and need not be filed.

- **Research Agreement with Alcon Research**

In connection with the SKS acquisition, SKS assigned to Ohr its rights under a Second Research Agreement, dated July 30, 2013 (the "Alcon Agreement"), between SKS (together with its subsidiary, C Therapeutics, LLC) and Alcon Research, Ltd. ("Alcon"). The Alcon Agreement sets forth the terms and conditions of a pharmacokinetics and safety study to be conducted by SKS (now Ohr) to test sustained release formulations containing a confidential proprietary compound owned by Alcon. Each party granted a non-exclusive, royalty-free, non-sublicensable license to the other party, giving the other party the right to use its proprietary material (i.e., Alcon's compound and SKS' sustained release formulation technology or any combination of the two) solely to carry out research under the Alcon Agreement. The Alcon Agreement was filed in Ohr's Form 10-Q/A on December 9, 2014.

- **Research and License Agreement with EyeCRO**

SKS Ocular, LLC ("SKS") entered into a License and Supply Agreement (as amended, the "EyeCRO Agreement") with EyeCRO, LLC on October 24, 2013, which agreement was later assigned to Ohr on June 10, 2014 as part of the SKS asset acquisition. Pursuant to the EyeCRO Agreement, SKS granted a worldwide, non-transferrable, exclusive, non-sublicensable, royalty-bearing license to EyeCro to support its internal research program studying drug screening services for dry-age related macular degeneration and for studying the efficacy of EyeCRO's own proprietary compounds. To date, the only payment made by EyeCRO in respect of the EyeCRO Agreement was approximately $36,000, and such payment was made in fiscal year 2015.

The royalty is described in Item 1 of the Form 10-K on page 6 under "(c) Animal Model for Dry-AMD". No additional discussion of this agreement in Item 1 of the Form 10-K is therefore necessary, and the EyeCRO Agreement need not be filed as an exhibit to the Form 10-K.

- **Various license rights acquired from SKS Ocular, LLC and SKS Ocular 1, LLC.**

See paragraph 1 above concerning the Alcon Agreement.

In connection with the SKS acquisition SKS assigned to Ohr its rights under a certain license agreement relating to nano/micro particle fabrication technology for sustained release of proteins and other biologics. The terms of the license agreement are confidential. Related potential commercial products are currently too remote to require description or filing of this license agreement as an exhibit to the Form 10-K.

Other licenses received by Ohr in connection with the SKS acquisition are also immaterial to Ohr's business and therefore not discussed in the Form 10-K. See paragraph 1 above.

2. In an appropriately titled subsection, please expand your disclosure in your Business section to include a discussion of your material patents and patent applications, including the following:

- **Specific products, product groups and technologies to which such patents or patent applications relate;**
- **Whether the patents or patent applications are owned or licensed from third parties (please identify the relevant party if they are licensed);**
- **Type of patent protection such as composition of matter, use or process;**
- **Patent expiration dates and expected expiration dates for pending patent applications;**
- **Identification of applicable jurisdictions where patents are issued or where patent applications are pending;**
- **Contested proceedings and/or third-party claims over any of your patents or patent applications.**

Response:

Ohr disclosed the above information concerning its patents and related risks in "Risks Related to our Intellectual Property" on pages 24 through 27 in its Form 10-Q (the "December 2014 10-Q") for the quarter ended December 31, 2014, filed on February 9, 2015, and "Risks Related to our Intellectual Property" on pages S-23 through S-26 of Ohr's prospectus, dated February 6, 2015. Accordingly additional disclosure is not needed.

Item 2 Properties, page 16

3. Please file your lease agreements for your properties in San Diego and New York as exhibits to your annual report as required under Item 601(b)(10) of Regulation S-K.

Response

Until November 30, 2014, Ohr's New York office space was provided by BFK Law LLC. In consideration, Ohr granted to BFK Law LLC the warrant described in paragraph 8 below. Commencing December 1, 2014, Ohr leases its New York office pursuant to an oral agreement with an unrelated person on a month to month basis at $3,796 per month. The lease was not in effect on September 30, 2014, and is not a material contract which must be filed under Item 601(b)(10) of Regulation S-K.

Ohr's premises in San Diego, California are leased pursuant to a lease expiring August 31, 2016, as disclosed in footnote 11 to the Financial Statements on page F-20 of the Form 10-K. Due to its short term and small scale, the lease is not a material contract which must be filed under Item 601(b)(10) of Regulation S-K.

Managements' Discussion and Analysis of Financial Condition and Results of Operations General, page 20

4. Please revise your discussion to include management's perspective on the business and provide an executive level overview of the company to provide context for the remainder of the MD&A discussion. For example, we note from your disclosure elsewhere in your annual report that you acquired certain assets of SKS Ocular, LLC and entered into a joint venture agreement with Cold Spring Harbor Laboratory, however, these transactions are not described or addressed in the MD&A. In addition, please address the risks and challenges facing your company and how management is dealing with these issues. You may refer to MD&A Release No. 33-8350; 34-48960; FR-72 (December 19, 2003) on our website at www.sec.gov for more guidance.

Response

Ohr is a pre-revenue company with its current primary focus on clinical trials and research and development. The additional costs associated with more personnel and research projects associated with the SKS acquisition are described fully in Item 1 and Item 1A of the Form 10-K. The DepYmed joint venture is described on page 8 of the Form 10-K and Ohr's obligations are disclosed in Note 8 of the financial statement included in the December 2014 Form 10-Q. Repetitive disclosure in the MD&A would not provide useful additional information.

Results of Operations, page 21

5. Please revise this section so that there is more focus on analysis as required by MD&A Release No. 33-8350; 34-48960; FR-72 (December 19, 2003). In that release, we explained that, "MD&A requires . . . an 'analysis' of known material trends, events, demands, commitments and uncertainties. MD&A should not be merely a restatement of financial statement information in a narrative form . . . A thorough analysis often will involve discussing both the intermediate effects of those matters and the reasons underlying those intermediate effects." For example:

- **Professional fees have increased. Please disclose the reason for this increase.**
- **Salaries and wages have increased. If you have increased the number of employees, revise to disclose the number of new employees.**
- **Research and development costs have increased. Please specifically discuss which development and testing efforts accounted for the increase.**

Please review your entire MD&A and revise accordingly.

Response

See our response to paragraph 4 above. Item 2. of the December 2014 Form 10-Q, at page 16, Item 2 of the June 30, 2014 Form 10-Q at pages 18-19, and Item 2 of the March 31, 2014 Form 10-Q at page 16 provides disclosure of these expenses and relative trends.

Research and Development expense, page 22

6. Please revise to disclose a break out of research and development expense by project or in some other manner to provide more transparency as to the type of expenses incurred. Also revise to clarify the extent to which research and development expenses include professional fees and salaries and wages. In this regard, revise your statement of operations on F-4 to present expenses consistently as it includes some expenses by the nature (i.e. general and administrative, research and development) and some by type (i.e. professional fees, salaries and wages). This will require you to conform your disclosure throughout MD&A to be consistent with the revised income statement presentation.

Response

We note your comment concerning the statement of operations and will make these changes prospectively in our future quarterly and annual reports, breaking out the expenses as requested. Ohr is a pre-revenue company and substantially all its expenses are directed to developing a potentially commercial product. The salaries and wages expenses that could be allocable to the research and development account are not material, and the statement of operations accurately represents results of operations through September 30, 2014.

Executive Compensation, page 29

7. Please provide the disclosure required by Item 402 of Regulation S-K for your three most highly compensated executive officers other than the principal executive officer and the principal financial officer. Alternatively, if you do not believe that an of your employees qualify as "executive officers" as that term is defined in Exchange Act Rule 3b-7, please provide a reasonably detailed analysis in support of determination.

Response

Until June 10, 2014, Ohr had only two employees, its chief executive officer and its chief financial officer, and provided the disclosure required under Item 402 of Regulation S-K for such executive officers. On June 10, 2014, Ohr acquired certain SKS Assets and hired nine former employees of SKS, none of whom have any policy making function for Ohr and accordingly are not "executive officers" as defined in Exchange Act Rule 3b-7.

Related Party Transactions, page 29

8. We note your disclosure on page 16 regarding the arrangement the company has with BFK Law LLC, a related person of Mr. Backenroth for the use of office facilities in New York City. Please provide the material terms of this transaction in Item 13 of your Form 10-K as required by Item 404 of Regulation S-K. Further, please file the warrant agreement issued to BFK Law LLC as an exhibit, as required by Item 601(b)(10) of Regulation S-K.

Response

Until November 30, 2014, Ohr's New York office space was provided by BFK Law LLC. In consideration, Ohr granted to BFK Law LLC a five year warrant to purchase 25,000 shares of its Common Stock, which was valued when granted at $65,978, as disclosed in footnote 9 of the Financial Statements included in the Form 10-K at page F-17. The warrant was in Ohr's customary form, previously filed as Exhibit 10.21 with Ohr's Quarterly Report on Form 10-Q filed on July 13, 2011. This was the only payment to BFK Law LLC and it did not exceed $120,000; consequently, neither the lease nor the warrant is a material contract required to be filed under Item 404 or Item 601(b)(10) of Regulation S-K.

Financial Statements
Notes to the Consolidated Financial Statements
Note 3 – Asset Acquisitions, page F-12

9. Regarding the $17.7 million of license rights acquired in the SKS acquisition, please tell us:

- **Their nature, purpose and how you use them in your ongoing business;**
- **The valuation technique and significant assumptions used to arrive at their fair value; and**
- **Your consideration of the applicability of ASC 350-30-35-17A.**

Response

Please see our response to paragraph 2.

Four methods were used to value the license rights. These included a Relief from Royalty method, a Risk Adjusted NPV, a Decision Tree method (incorporating cumulative probability of success to complete each step (preclinical, phases I-III, and obtain new drug approval) for each product, research and development costs of each step), and an Asset Cost Accumulation method. The four methods were weighted to arrive at the concluded fair value. Financial projections were created for five scenarios which incorporated various market share penetrations for each of the four potential products and were weighted for each methodology. In consultation with Ohr's valuation experts, it was determined that the potential projects using the license rights were at too early a stage to ascribe a fair value to in-process research and development. There were no events in the short period between the SKS acquisition and the September 30, 2014 year end which required an impairment analysis under ASC 350-30-35-17A.

10. You acquired "a sustained-release technology platform under development as well as a pipeline of pre-clinical sustained-release drug product candidates" in the SKS acquisition. Please tell us why you attributed no fair value to these in-process research and development projects.

Response

See response to paragraphs 1, 2 and 9 above.

The Company hereby acknowledges 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 the staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Very truly yours,

OHR PHARMACEUTICAL, INC.

By: /s/ Irach Taraporewala
Irach Taraporewala
Chief Executive Officer

By: /s/ Sam Backenroth
Sam Backenroth
Principal Financial Officer, Principal
Accounting Officer and Controller

cc: James Kardon, Esq.