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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

March 5, 2017

Jeremy M. Levin, DPhil, MB BChir
Chief Executive Officer
Ovid Therapeutics Inc.
1460 Broadway, Suite 15044
New York, NY 10036

Re: Ovid Therapeutics Inc.
Draft Registration Statement on Form S-1
Submitted February 3, 2017
CIK No. 0001636651

Dear Dr. Levin:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Prospectus Summary, page 1
Overview, page 1

1. Where you state you have commenced the Phase 2 trial, please also disclose that this is primarily a safety trial that is designed to provide a proof-of-concept on the efficacy parameters.

2. Please revise to clarify that your "proprietary map of disease-relevant pathways" is not considered appropriate for patent protection and that you rely on trade secrets to protect this aspect of your business, as discussed on page 98.

3. Please balance your Summary disclosure by including a brief discussion of your dependence on third parties for manufacturing as well as the conduct and supervision of your clinical trials.

OV 101, page 3

4. Because approval of the U.S. Food and Drug Administration ("FDA") and other comparable regulatory agencies is dependent on such agencies making a determination (according to criteria specified in law and agency regulations) that a drug or biologic is safe, it is premature for you to describe or suggest that OV101 or any other non-approved drug is safe. Accordingly, please revise the statements on page 3 and elsewhere in the prospectus. Additionally, please explain the significance of such prior clinical trials in primary insomnia in meeting the criteria for approval of OV101 for the indications you propose.

OV935, page 3

5. Please explain why you believe OV935 is a "first-in-class" inhibitor of the enzyme cholesterol 24-hydroxylase, or CH24H.

OV935 offers the possibility not only….page 3

6. Please revise your disclosure on page 3 and elsewhere in the prospectus to make clear that any observations you make about your drug candidates' potential for efficacy are not based on the FDA's or any other comparable governmental agency's assessment and do not indicate that your drug candidates will achieve favorable results in any later stage trials or that the FDA or comparable agency will ultimately determine that your drug candidates are effective for purposes of granting marketing approval.

Implications of Being an Emerging Growth Company, page 4

7. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

Use of Proceeds, page 47

8. It appears from your disclosure that the proceeds from the offering will not be sufficient to fund development of your product candidates through regulatory approval and commercialization. Please indicate how far the proceeds from the offering will allow you to proceed with the continued development of OV101 and OV905. Please also disclose the sources of other funds needed to reach regulatory approval and commercialization for each product candidate. Refer to Instruction 3 to Item 504 of Regulation S-K.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Estimates
Stock-Based Compensation, page 65

9. Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the IPO and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features.

Business, page 69
Previous Clinical Development of OV101, page 85

10. Where you describe the Phase 3 trials Lundbeck conducted for OV101, please expand to disclose when the trials were conducted, who conducted them, their scope and design, their endpoints and whether these endpoints were met.

Safety and Tolerability, page 85

11. We note your disclosure that Lundbeck and Merck observed serious adverse events in some of the patients in the Phase 2 and 3 clinical trials of OV101 for the indication of insomnia. Please expand your disclosure to list all serious adverse events reported to date and the number of patients who have reported such events, or provide us with an analysis as to why expanded disclosure here or elsewhere would not be material.

OV395 Clinical Development Plan, page 94

12. Please clarify in the second sentence on page 94, if true, that you will be dependent upon Takeda to submit an investigational new drug application to the FDA in order to progress your OV935 clinical development plan.

License and Collaboration Agreements, page 94

13. Please include a discussion of the Master Services Agreement with a clinical research organization referenced in Note 3 to the audited financial statements for the year-ended December 31, 2015 included in the prospectus and file the agreement as an exhibit, or tell us why you believe it is not required to be filed.

General

14. Please provide us proofs of all graphics, visual, or photographic information you will provide in the printed prospectus prior to its use, for example in a preliminary prospectus. Please note that we may have comments regarding this material.

You may contact Bonnie Baynes at (202) 551-4924 or Sharon Blume at (202) 551-3474 if you have questions regarding comments on the financial statements and related matters. Please contact Christine Westbrook at (202) 551-5019 or Mary Beth Breslin at (202) 551-3625 with any other questions.

Sincerely,

/s/ Mary Beth Breslin for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Laura A. Berezin
Cooley LLP