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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

May 17, 2017

Clarissa Desjardins
President and Chief Executive Officer
Clementia Pharmaceuticals, Inc.
4150 St Catherine Street West, Suite 550
Montreal, Quebec, Canada H3Z 2Y5

Re: Clementia Pharmaceuticals, Inc.
Draft Registration Statement on Form F-1
Submitted April 19, 2017
CIK No. 0001647320

Dear Ms. Desjardins:

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
Our Company, page 1

1. We refer to your risk factor disclosure on page 15 indicating that to date your clinical trials of palovarotene have not demonstrated statistically significant results. Accordingly, please tell us your basis for disclosing in the second sentence of the prospectus summary that palovarotene "has shown potent activity" in a variety of tissues. Also, revise your disclosure on page 2 concerning "the encouraging safety and efficacy results" to explain briefly those results, including, if applicable, the lack of statistically significant supporting data from your clinical trials.

2. Please revise the Summary to explain the meaning of the following terms:
   - first-in-class;
   - fibrosis;
   - agonist;
   - registration trial;
   - transgenic animal model; and
   - pivotal phase.

3. Your disclosure in the first paragraph indicates that two of the three planned registration trials are "potential" registration trials. Please revise to clarify how these trials are potential in nature.

4. Please describe the significance of obtaining Orphan Drug Designation and Fast Track Designation when you first reference them in this section.

Our Programs, page 1

5. In the development programs table, we refer to the arrows depicting the next planned clinical phases of development for each indication. Because you have not commenced these clinical phases, please revise to remove these arrows from your Summary presentation.

6. We refer to your development programs table which highlights that you have "Multiple Research Programs" for "Other RARy Agonists." Please revise your table to identify the specific product candidates and indications. If you have not yet identified specific product candidates or the indications which they will treat, please remove reference to such programs from your table as such information is premature for inclusion in your Summary presentation.

Palovarotene for Dry Eye Disease, page 3

7. Please clarify that "IND" is the acronym for "investigations new drug application" and describe the significance of an IND when you first refer to it in this section.

Complete development and obtain regulatory approval..., page 4

8. We refer to your disclosure that "success in any one of our three potential registration trials can form the basis of FDA approval of palovarotene." Given your disclosures that the potential registration trials target different indications, please revise to clarify, if true, that FDA approval for one indication would not constitute approval for all three indications.

Summary Risk Factors, page 5

9. Please revise to highlight the risk on page 39 concerning your belief that you will be a passive foreign investment company for the taxable year ending December 31, 2017.

Implications of Being an Emerging Growth Company..., page 5

10. 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.

If serious adverse events or unacceptable side effects are identified ..., page 14

11. Please revise to identify the increased side effects that you have observed with higher doses of palovarotene and indicate whether any of them were severe. Revise to discuss these observations in greater detail in your Business discussion.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical accounting judgments and key sources of estimation uncertainty
Share-based Payments, page 68

12. Once you have an estimated offering price range, please explain to us the reasons for any differences between the recent valuations of your common stock leading up to the IPO and the midpoint of the estimated offering price range.

Business, page 76

13. Under the appropriately titled subsection, please disclose when each IND was filed for the commencement of clinical trials for palovarotene, the trial sponsor and the subject of the IND.

Our Programs
PVO-1A-201, page 84

14. Please revise to explain the meaning and significance of the terms "statistical significance," "statistically significant" and p-values and describe how they relate to the FDA's evidentiary standards of efficacy. In doing so, please explain the relationship between "p-values" and "statistical significance." Also, revise the disclosure on page 85 to clarify, if true, that the p=0.0837 observed in the trial does not demonstrate statistical significance.

15. Please revise to clarify what it means to have "80% power to detect a linear trend."

16. Please revise to present the data for the Week 6 primary endpoint. Also, explain briefly how subject-reported flare-up pain was measured and disclose the data supporting the P=0.1527 figure you present.

Earlier Development Work, page 94

17. We note the discussion of your collaboration with Dr. Yamaguchi in the first paragraph of this section. Please disclose whether your collaboration with Dr. Yamaguchi is governed by an agreement. If so, please disclose the material terms of the agreement and file it as an exhibit. Also revise to clarify whether Dr. Yamaguchi is affiliated with Yamaguchi University.

Planned Phase 2/3/ Trial, page 94

18. Please describe the material terms of the agreement with Dr. Luca Sangiorgi, M.D. Ph.D., including the parties' rights and obligations, any payment provisions, the duration of the agreement and termination provisions. Also, please file the agreement as an exhibit.

License Agreements, page 100

19. For each of the four license agreements, revise to disclose the maximum amounts of (i) clinical, (ii) regulatory and (ii) sales milestones that you may be obligated to pay pursuant to each agreement as well as any aggregate amounts you have paid to date. With respect to the Roche agreement, revise to disclose the royalty rate within a ten percent range (e.g., teens, twenties, thirties, etc.).

Galderma Agreement, page 102

20. Please revise to disclose whether the compounds are patented or subject to patent applications. If so, please revise to discuss the term of the patents in this section or in your intellectual property discussion.

Employment Agreements, page 123

21. We note that prior to the consummation of this offering, you intend to enter into amended and restated employment agreements with your NEOs. Once known, please expand your disclosure in this section to provide the material terms of the employment agreements.

Report of Independent Registered Public Accounting Firm, page F-2

22. In your next Form F-1 submission or filing, please revise to remove the restrictive legend from the independent auditors' report and finalize the date of the report upon completion of the events in Note 17 prior to effectiveness. In addition, please provide a revised auditors' report, clarifying that the audits were conducted in accordance with standards of the Public Company Accounting Oversight Board (United States). Refer to Rule 2-02(a) of Regulation S-X and PCAOB AS 3101, paragraph .08.

Notes to the Consolidated Financial Statements
13. Commitments and contingencies, page F-23

23. Please describe and quantify for us the terms governing your license agreements. Revise your disclosures accordingly.

You may contact Franklin Wyman at (202) 551-3660 or Mary Mast at (202) 551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Johnny Gharib at (202) 551-3170 or Joseph McCann at (202) 551-6262 with any other questions.

Sincerely,

/s/ Joseph McCann for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Martin C. Glass, Esq.
Jenner & Block LLP