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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4720

January 13, 2016

Via E-mail
Fredrik Wiklund
President and Chief Executive Officer
Celladon Corporation
12707 High Bluff Drive, Suite 200
San Diego, CA 92130

**Re: Celladon Corporation**
**Registration Statement on Form S-4**
**Filed December 14, 2015**
**File No. 333-208521**

Dear Mr. Wiklund:

We have reviewed your 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to our comments, we may have additional comments.

Prospectus Summary, page 7

1. We note your disclosure that Lonafarnib and ubenimex for (PAH) have been granted orphan drug designation. However, on page 176 you state that you "expect" lonafarnib to be eligible for orphan drug designation and that you are "seeking" orphan drug designation for ubenimex for (PAH). Please revise the disclosure throughout your prospectus to address this apparent discrepancy and clearly disclose the current status for orphan drug designation for each of your product candidates.

2. Please revise the discussion labeled "No Solicitation" to describe the limited exception.

3. Please revise to quantify the cash bonuses that each remaining Celladon officers will receive in addition to the incentive milestone payments.

Risk Factors
The exchange ratio is not adjustable based on the market price of Celladon common stock …, page 25

4. We note your statement that "the exchange ratio is only adjustable…if the outstanding stock of Eiger or the outstanding common stock of Celladon changes based upon certain events, including the proposed 1-for-15 reverse stock split." From this statement, it appears that the exchange ratio will change following the reverse stock split. If that is correct, please clarify throughout the document and disclose the exchange ratio following the reverse stock split.

If Celladon fails to continue to meet all applicable NASDAQ Global Market requirements…, page 30

5. Please revise to clarify that Eiger can terminate the merger agreement if Celladon fails to meet the NASDAQ listing requirements.

Background of the Merger, page 78

6. Please expand your discussion to describe the meetings between Celladon and Eiger where negotiations took place. Your discussions should identify the parties who were present, the issues discussed and the proposed merger terms at the time of the meeting. For example, at what time were proposed terms for a merger with Eiger first proposed and what were they? How did the proposed terms change during the course of the negotiations? What was the nature of Eiger's comments to Celladon's proposed terms that were conveyed on September 18, 2015? What provisions were discussed on November 7, 2015?

7. We note that on May 28, 2015 you engaged Wedbush in connection with a potential merger, reorganization, or other business combination transaction or potential alternatives thereto, including a liquidation and dissolution of Celladon. Additionally, we note that in the discussion of "Celladon Reasons for the Merger" the Celladon Board reviewed the risks related to liquidation and continuing to operate on a stand-alone basis. However, you have not described these discussions. Please revise your disclosure to describe these discussions in greater detail.

8. We note Celladon considered potential transactions with Parties 1, 2, 3, 4, 5 and 6. For each party, please disclose the terms of any proposed transaction and the reasons(s) why these transactions were not pursued. For example, we note that on August 17 and 18, 2015 Mr. Cleveland provided the update that due to the absence of desired elements in a potential combination with Party 1, further discussions with Party 1 were terminated. What were the desired elements? If the proposed terms would have resulted in Celladon shareholders having an equity interest in the combined company resulting from a merger between Parties 1, 2, 3, 4, 5 or 6, please identify that party by name.

Opinion of the Celladon Financial Advisor
Public Company Market Valuation Analysis, page 95

9. We note that Wedbush reviewed the publicly available information relating to the publicly traded companies appearing on page 95. Were these companies the only publicly traded companies with a market capitalization under $1 billion in the biopharmaceutical industry with multiple candidates in Phase 2 and no candidates beyond Phase 2? If there were others, please identify the others and explain why they were not included in Wedbush's analysis. Please provide similar information with respect to the antivirals and the merger transaction analyses and initial public offering analyses.

Merger and Acquisition Transaction Analysis – Eiger, page 97

10. Please revise to clarify if any of the Acquirors were in a position similar to Celladon's, in which they were winding down there operations.

11. Additionally, clarify whether the target companies were publicly traded at the time of the acquisition.

Tax Treatment of the Merger, page 108

12. We note your statement that the parties intend the merger to qualify as a tax free reorganization. Please file a tax opinion as required by Item 601(b)(8) of Regulation S-K. Additionally, revise the discussion of the tax consequences to clarify that the discussion is counsel's opinion.

The Merger Agreement
Exchange Ratio, page 116

13. If accurate, please clarify that the relative valuations were determined by Wedbush in its Public Company Markey Valuation Analysis.

Eiger Business, page 153

14. In an appropriately titled subsection, please briefly describe the Phase 1 studies you are relying upon for your Phase 2 clinical trials for each of product candidates. Please disclose who conducted the trials and when and include a discussion of the trials' designs and the results observed.

Product Candidate Pipeline, page 153

15. Please clearly identify the current stage of development for each of product candidates. As currently presented, it is not clear whether phase 2 clinical trials have begun for

Bestatin. Additionally, while you state that lonafarnib is your most advanced product candidate, the chart appears to indicate that Exendin has the same timeline for development.

16. In a footnote or narrative disclosure to the pipeline chart on this page, you should disclose the identity of the entities that conducted Phase 1 clinical trials for your product candidates. Please additionally disclose, if true, that you expect to rely on data from these completed Phase 1 studies in order to file your INDs and launch directly into Phase 2.

LOWR HDV—1 (LOnafarnib With and without Ritonavir) Phase 2 Study, page 160

17. Please disclose whether the results observed in the LOWR HDV-1 study were statistically significant.

18. We note your discussion regarding the results observed in the LOWR HDV – 1 study as compared to the HIDIT-2 study. However we note that the HIDIT-2 study was conducted on 91 patients while only 3 patients received each treatment in the LOWR HDV-1 study. Please discuss how your results may differ given a larger sample size.

19. Please disclose whether an IND has been approved for Lonofarnib in the HDV indication and state where you conducted your phase 2 clinical trials.

Eiger's Solution: Exendin (9-39), page 165

20. Please revise to describe Exendin (9-39) in plain language so that your disclosure may be understood by a lay reader not acquainted with the relevant industry or scientific field.

21. We note that Exendin (9-39), brand named Byetta, has been approved for the treatment of Type 2 diabetes. However, we also note your statement that Exendin (9-39), as a new molecular entity, has never been approved or commercialized for any indication. Please explain the difference between Byetta and Exendin (9-39) "as a new molecular entity" or revise this apparent discrepancy.

Clinical Data to Date, page 166

22. Please disclose whether an IND has been approved for Exendin (9-39) in the hyperinsulinemic hypoglycemia indication.

23. Please disclose whether the results observed in the clinical proof of concept studies were statistically significant.

24. Please provide a discussion of the results observed in the second clinical proof of concept study of exendin (9-39).

Ubinemex for Pulmonary Arterial Hypertension, page 167

25. Please revise to describe Ubenimex and the results of the preclinical study in plain language so that your disclosure may be understood by a lay reader not acquainted with the relevant industry or scientific field.

Patent protection for Eiger's Product Candidates, page 176

26. Please briefly explain the process for a PCT application and how that application can "mature" into a patent application in the US. Additionally, please discuss the potential consequences for you if you are unable to obtain additional patent protection for lonafarnib, your lead product candidate**.**

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company 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 staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Alla Berenshteyn at (202) 551-4325 or me at (202) 551-3675 with any questions.

Sincerely,

/s/ Suzanne Hayes

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Via E-mail
Patty M. DeGaetano
Pillsbury Winthrop Shaw Pittman LLP