



DIVISION OF  
CORPORATION FINANCE

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

October 25, 2013

Via E-mail

Krisztina Zsebo, Ph.D.  
President and Chief Executive Officer  
Celladon Corporation  
12760 High Bluff Drive, Suite 240  
San Diego, California 92130

**Re: Celladon Corporation  
Registration Statement on Form S-1  
Filed October 11, 2013  
File No. 333-191688**

Dear Dr. Zsebo:

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 these comments, we may have additional comments.

Management's Discussion and Analysis of Financial Condition and Results of Operations  
Determination of the Fair Value of Common Stock, page 71

1. We acknowledge your response to comment 12. It does not appear that your disclosure revisions on page 71 regarding the responsibility for third-party valuation reports include the report you utilized as of June 30, 2013. The disclosure provided in the first paragraph of the Retrospective Reassessment of Fair Value section on page 73 continues to imply full reliance on that report. If true, please revise your disclosure on page 71 to include the June 30, 2013 valuation or your disclosure on page 73 to indicate that you relied "in part" on the June 30, 2013 valuation report.

Principal Stockholders, page 158

2. Please clarify the relationship between Novartis AG and Novartis Bioventures Ltd., and whether Novartis Bioventures Ltd. is controlled by Novartis AG.

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.

Krisztina Zsebo, Ph.D.  
Celladon Corporation  
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You may contact Christine Allen at (202) 551-3652 or Mark Brunhofer at (202) 551-3638 if you have questions regarding comments on the financial statements and related matters. Please contact Matthew Jones at (202) 551-3786, John Krug at (202) 551-3862 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler  
Assistant Director

cc: Jason Kent, Esquire  
Cooley LLP  
4401 Eastgate Mall  
San Diego, California 92121