

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

September 27, 2010

Theodore R. Schroeder President and CEO Cadence Pharmaceuticals, Inc. 12481 High Bluff Dr., Suite 200 San Diego, CA 92130

Re: Cadence Pharmaceuticals, Inc.

Form 10-K for the year ended December 31, 2009 Definitive Proxy Statement on Schedule 14A

Filed April 29, 2010 File No. 1-33103

Dear Mr. Schroeder:

We have reviewed your July 27, 2010 response to our July 13, 2010 comment letter and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Form 10-K for the Fiscal Year Ended December 31, 2009

7. Commitments and Contingencies

Supply Agreements

Baxter Healthcare Corporation, page 77

1. We acknowledge your response to prior comment one. The purpose of our comment is to provide information regarding the amounts paid or to be paid under this agreement. Therefore, please revise your proposed disclosure to address the following regarding your supply agreement with Baxter:

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- The amount of development fees paid to Baxter for each of the periods presented.
- The fixed manufacturing fee. While some items cannot be quantified due to the competitive nature of your business, other items, such as the fixed manufacturing fee, do not appear to be of confidential matter. If this fee is adjustable, please provide an estimated range of the fees to be paid.
- Regarding the purchase obligation to Baxter, please disclose the total amount paid for units purchased from Baxter rather than the per unit cost.

## 8. License Agreements and Acquired Development and Commercialization Rights, page 78

2. We acknowledge your response to prior comment two. Please revise your disclosure to provide a range of royalties (within ten percentage points, for example "teens," "twenties," etc.) that you are obligated to pay on the sale of Ofirmev. The information you received confidential treatment for was the actual royalty rates, not a range of royalties within ten percentage points.

Proxy Statement on Schedule 14A, filed April 29, 2010

## Annual Incentive Compensation Plan, page 44

3. We note the last sentence in your response to our prior comment 3. We believe that disclosure about the achievement of each corporate and individual performance objective (whether each of the objectives was met or not) is material information that provides meaningful disclosure to Cadence's investors. Your disclosure should discuss specific items of performance taken into account in setting compensation policies and making compensation decisions (see Item 402(b) of Regulation S-K). Please confirm that in your 2010 executive compensation disclosure you will provide the requested analysis.

You may contact Sasha Parikh, Staff Accountant, at (202) 551-3627 or Gus Rodriguez, Accounting Branch Chief, at (202) 551-3752 if you have questions regarding comments on the financial statements and related matters. Please contact Sebastian Gomez-Abero, Staff Attorney, at (202) 551-3578 with any other questions. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant