



DIVISION OF
CORPORATION FINANCE

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

September 10, 2012

Via E-mail

Mr. Michael S. Wyzga
President and Chief Executive Officer
Radius Health, Inc.
201 Broadway, 6th Floor
Cambridge, MA 02139

**Re: Radius Health, Inc.
Schedule 14C
Filed August 16, 2012
File No. 000-53173**

Dear Mr. Wyzga:

We have limited our review of your filing to those issues we have addressed in our 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 filing 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 filing and the information you provide in response to these comments, we may have additional comments.

Action 1—Amendment to Certificate of Designations, page 3

1. Please revise your disclosure to describe the differences between the dividend provisions in the March 2011 Stock Issuance Agreement and the May 2011 Stock Issuance Agreement, as amended, and the general effect such changes had or will have on the rights of existing security holders. See Item 12 of Schedule 14A.
2. In this regard, please also revise to describe in more detail the Series A-6 Convertible Preferred Stock and when it will be issued.
3. We note your disclosure on page 4 that the May 2011 Stock Issuance Agreement has been subsequently amended, and may be further amended in the future. Please advise us of where we can find the most recent version of the May 2011 Stock Issuance Agreement, as amended.

4. Please provide the disclosure required by Item 12(d) of Schedule 14A.

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Shaz Niazi at (202) 551-3121 or Brigitte Lippmann at (202) 551-3713 with any questions.

Sincerely,

/s/ Brigitte Lippmann (for)

John Reynolds
Assistant Director