

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

April 25, 2013

Via E-mail
Dennis M. Mulroy
Chief Financial Officer
Cardium Therapeutics, Inc.
12255 El Camino Real, Suite 250
San Diego, CA 92130

Re: Cardium Therapeutics, Inc.

Preliminary Proxy Statement on Schedule 14A

Filed April 16, 2013 File No. 001-33635

Dear Mr. Mulroy:

We have limited our review of your filing to the issue addressed in the following comment.

Please respond to this letter by amending your filing and providing the requested information. If you do not believe our comment applies 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 our comment, we may have additional comments.

Proposal 5—Approval of a Reverse Split to Effect a Reverse Stock Split..., page 19

1. We note your disclosure that, in connection with the reverse split, you do not intend to change the number of shares of common stock authorized, resulting in additional authorized but unissued shares that can be used to meet your future strategic and operating needs. Please disclose whether you currently have, or do not have, any plans, arrangements or understandings, written or oral, to issue any of the additional authorized but unissued shares. If such plans exist, please disclose all material information.

<u>Proposal 6—To Approve an Amendment to the Company's Amended and Restated Articles of Incorporation..., page 30</u>

2. Please disclose whether you currently have, or do not have, any plans, arrangements or understandings, written or oral, to issue any of the additional authorized but unissued shares if Proposal 6 is approved. If such plans exist, please disclose all material information.

Dennis M. Mulroy Cardium Therapeutics, Inc. April 25, 2013 Page 2

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 Amy Reischauer at (202) 551-3793 or me at (202) 551-3715 with any questions.

Sincerely,

/Jeffrey P. Riedler

Jeffrey P. Riedler Assistant Director

cc: Via E-mail

Tyler M. Dylan-Hyde, Ph.D. Chief Business Officer, General Counsel, Executive Vice President and Secretary Cardium Therapeutics, Inc. 12255 El Camino Real, Suite 250 San Diego, CA 92130