



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 4720

February 29, 2016

Paul C. Grint, M.D.  
President and Chief Executive Officer  
Regulus Therapeutics Inc.  
3545 John Hopkins Ct., Suite 210  
San Diego, CA 92121

**Re: Regulus Therapeutics Inc.  
Post-Effective Amendments No. 2 and 3 to Form S-3  
Filed February 23, 2016  
File No. 333-203292**

Dear Dr. Grint:

We have limited our review of your registration statement to the issues we have addressed in our comments. In 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 the comment, we may have additional comments.

General

1. We note that you incorporate by reference your Annual Report filed on Form 10-K for the year ended December 31, 2015. However, the Form 10-K incorporates information from the company's proxy which has not yet been filed. Please note that we will not be in a position to declare your filing effective until such time as the complete disclosure required by Form 10-K has been filed. Please either amend your Form 10-K to include Part III or file the proxy. Please refer to Compliance and Disclosure Interpretations, Securities Act Forms, Question 123.01 for guidance.

Incorporation Of Certain Information By Reference, page 15

2. Please revise your disclosure to incorporate by reference applicable filings made after the date of the initial registration statement and prior to effectiveness of the registration

statement. For additional guidance, see Compliance and Disclosure Interpretations, Securities Act Forms, Question 123.05.

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 Tara Keating Brooks at (202) 551-8336 or Erin Jaskot at (202) 551-3442 with any questions.

Sincerely,

/s/ Erin K. Jaskot, *for*

Suzanne Hayes  
Office of Healthcare and Insurance

cc: James C. Pennington, Esq.