

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

Mail Stop 4546

August 16, 2016

Christopher D. T. Guiffre President and Chief Executive Officer Cerulean Pharma Inc. 35 Gatehouse Drive Waltham, MA 02451

Re: Cerulean Pharma Inc.

Post-Effective Amendment No. 1 to Form S-3

Filed August 5, 2016 File No. 333-206396

Dear Mr. Guiffre:

We have limited our review of your post-effective amendment to the issue addressed in the comment below. Please respond to this letter by amending your registration statement as requested. 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 a response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

Prospectus Cover Page

1. We note that the aggregate market value of your voting and non-voting common equity held by non-affiliates during the 60 days prior to the filing of this registration statement does not appear to exceed \$75 million, and as such, you do not appear to be eligible to use Form S-3 pursuant to General Instruction I.B.1 of the form. If you believe you are eligible to use Form S-3 pursuant to General Instruction I.B.6, please revise the cover page of the prospectus to provide the information required by Instruction 7.

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 comment, before we can declare the amended registration statement effective, the company should provide us with a letter, acknowledging that:

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- 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 contact Scot Foley at (202) 551-3383 or Mary Beth Breslin at (202) 551-3625 with any questions.

Sincerely,

/s/ Mary Beth Breslin for

Suzanne Hayes Assistant Director Office of Healthcare and Insurance

cc: Steven D. Singer, Esq.
Wilmer Cutler Pickering Hale and Dorr LLP