

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

October 20, 2021

Christopher Staten
Interim Chief Financial Officer
Aerie Pharmaceuticals Inc
4301 Emperor Boulevard, Suite 400
Durham, North Carolina 27703

Re: Aerie Pharmaceuticals Inc Form 10-K for the fiscal year ended December 31, 2020 Filed February 26, 2021 File No. 001-36152

Dear Mr. Staten:

We have reviewed your filing and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

Form 10-K for the fiscal year ended December 31, 2020

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>
<u>Results of Operations</u>

Research and development expenses, page 91

1. You disclose that you are furthering the development of product candidates focused on dry eye and retinal diseases, particularly AR-15512, AR-1105, AR-13503 SR and AR-14034 SR. However you only break out research and development expenses separately for Rhopressa and Rocklatan which represented approximately 12 percent of total research and development expenses for the year ended December 31, 2020. Please provide us with proposed disclosures to be included in future periodic reports which separately quantifies your research and development expenses by each product candidate for which significant investments were made during the periods, e.g., for AR-15512, AR-1105 and AR-13503. If you do not track your research and development costs by product candidate, disclose that fact as well as why you no not maintain and evaluate research and development costs by project.

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We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Vanessa Robertson at 202-551-3649 or Kevin Vaughn at 202-551-3494 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences