

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

DIVISION OF CORPORATION FINANCE

Mail Stop 3030

November 2, 2015

Robin C. Stacey Chief Executive Officer Cesca Therapeutics, Inc. 2711 Citrus Road Rancho Cordova, California 95742

> Re: Cesca Therapeutics, Inc. Registration Statement on Form S-1 Response Dated October 26, 2015 File No. 333-207115

Dear Mr. Stacey:

We have reviewed your October 26, 2015 response and have the following 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 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 these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our October 21, 2015 letter.

We note your response to our prior comment number 1; however, we are unable to agree that this transaction is properly characterized as a secondary offering. We note in this respect that (1) the common shares offered by the selling security-holders underlie convertible debentures and warrants, some with declining exercise prices, and (2) the common shares registered appear to represent more than 200% of your shares outstanding held by non-affiliates. Please amend onto a form for which you are eligible to conduct a primary offering, disclose a fixed price at which the shares will be offered, and identify the selling security holders as underwriters.

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You may contact me at (202) 551-3528 with any questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz Assistant Director Office of Electronics and Machinery