



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

May 10, 2018

Via E-mail

Vivian Liu
Chief Operating Officer
Cesca Therapeutics Inc.
2711 Citrus Road
Rancho Cordova, California 95742

**Re: Cesca Therapeutics Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed May 8, 2018
File No. 333-224185**

Dear Ms. Liu:

We have limited our review of your amended registration statement to those issues we have addressed in our 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 May 1, 2018 letter.

Calculation of Registration Fee

1. We note your response to prior comment 1; however, the maximum aggregate offering price of the units should be calculated separately from the maximum aggregate offering price of the pre-funded units. See the Note to the Calculation of Fee Table in Form S-1. Currently, you appear to be presenting one calculation for the common stock underlying the common warrants related to both the units and pre-funded units. For guidance, see the Division of Corporation Finance's Securities Act Rules Compliance and Disclosure Interpretation 240.05 available on the Commission's website.

Vivian Liu
Cesca Therapeutics Inc.
May 10, 2018
Page 2

Risk Factors, page 9

2. Please tell us whether the provisions of section 5.e of exhibits 10.37 and 10.38, or sections 5.9 and 5.21 of exhibit 10.39 apply to claims under the federal securities laws.

Please contact Heather Percival at (202) 551-3498 or me at (202) 551-3617 with any questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso
Branch Chief
Office of Electronics and Machinery

cc: Curt P. Creely, Esq.
Foley & Lardner LLP