



DIVISION OF
CORPORATION FINANCE

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

March 17, 2021

Shalabh Gupta, M.D.
Chief Executive Officer, President and Chairman
Unicycive Therapeutics, Inc.
5150 El Camino Real, Suite A-32
Los Altos, CA 94022

**Re: Unicycive Therapeutics, Inc.
Amendment No. 2 to Draft Registration Statement on Form S-1
Submitted February 18, 2021
CIK No. 0001766140**

Dear Dr. Gupta:

We have reviewed your amended draft registration statement 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 2 to Draft Registration Statement on Form S-1 submitted February 18, 2021

Background on Renazorb, page 52

1. We note your statement here and on page 53 that "Renazorb was minimally absorbed to the systemic circulation and was safe...." Please revise these and all similar statements throughout your prospectus that state or imply that your product candidates are safe or effective as these determinations are solely within the authority of the FDA and comparable regulatory bodies.

General

2. We note your response to prior comment 4 and reissue. The pipeline table on page 49 and on your website indicates that Renazorb has completed Phase 3 clinical trials. However,

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we note your disclosure on page 1 that "Spectrum conducted a Phase 1 clinical trial with Renazorb in 2012 prior to the grant of [your] license in 2018." To the extent that you have completed Phase 2 and 3 clinical trials, please include disclosure that complies with prior comment 3. Otherwise, revise the pipeline table on page 49 and on your website to illustrate the product candidate's current status.

You may contact Ibolya Ignat at 202-551-3636 or Brian Cascio at 202-551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Jeffrey Gabor at 202-551-2544 or Celeste Murphy at 202-551-3257 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Jeffrey Fessler, Esq.