

June 7, 2021

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, D.C. 20549

Re: Unicycive Therapeutics, Inc.
Registration Statement on Form S-1
Filed May 21, 2021
File No. 333-256367

Ladies and Gentlemen:

This letter sets forth the responses of Unicycive Therapeutics, Inc., a Delaware corporation (the **'Company'**), to the comments received from the Staff (the **'Staff'**) of the U.S. Securities and Exchange Commission (the **"Commission"**) concerning its Registration Statement on Form S-1 (File No. 333-256367) filed with the Commission on May 21, 2021 (the **"Registration Statement"**).

References in the text of the responses herein to captions and page numbers refer to Amendment No. 1 to the Company's Registration Statement on Form S-1 (the **"Amended Registration Statement"**), which is being filed herewith.

Registration Statement on Form S-1 filed May 21, 2021

Exclusive Forum, page 86

COMMENT 1: We note that the choice of forum provision in your restated certificate to be effective upon the completion of the offering identifies the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation, including any "derivative action." We further note your disclosure on pages 33 and 86 of your prospectus stating that the such provision will not apply to suits brought to enforce a duty or liability created by the Securities Act or the Exchange Act. Please either (i) amend the provision in your restated certificate to clearly state that the provision does not apply to federal securities law claims or applies only to state law claims, as applicable, or (ii) provide reasonable assurance that you will make future investors aware of the provision's limited applicability, for example by including such disclosure in your future Exchange Act reports.

RESPONSE: The Company has amended its disclosure in the Amended Registration Statement. The Company also hereby confirms that it will make future investors aware of the provision's limited applicability, including, but not limited to, in the Company's future Exchange Act reports.

If you have any questions relating to any of the foregoing, please contact Jeffrey Fessler of Sheppard, Mullin, Richter & Hampton LLP at (212) 653-8700.

Very truly yours,

/s/ Jeffrey Fessler

Sheppard, Mullin, Richter & Hampton LLP