Unicycive Therapeutics, Inc. 5150 El Camino Real, Suite A-32 Los Altos, CA 94022

June 22, 2021

VIA EDGAR

United States Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549 Attention: Jeffrey Gabor

Re: Unicycive Therapeutics, Inc.

Registration Statement on Form S-1

Filed May 21, 2021 File No. 333-256367

Ladies and Gentlemen:

Pursuant to Rule 461 of the General Rules and Regulations under the Securities Act of 1933, as amended, Unicycive Therapeutics, Inc. (the "Company") respectfully requests that the effective date of the registration statement referred to above be accelerated so that it will become effective at 5:00 p.m., Eastern Daylight Time, on Thursday, June 24, 2021, or as soon thereafter as possible.

Please notify Jeffrey Fessler of Sheppard, Mullin, Richter & Hampton LLP, counsel to the Company, at (201) 669-0478 as soon as possible as to the time the Registration Statement has been declared effective pursuant to this acceleration request.

UNICYCIVE THERAPEUTICS, INC.

By: /s/ Shalabh Gupta

Name: Shalabh Gupta
Title: Chief Executive Officer