

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

August 22, 2022

Shalabh Gupta, M.D. Chief Executive Officer Unicycive Therapeutics, Inc. 4300 El Camino Real, Suite 210 Los Altos, CA 94022

Re: Unicycive Therapeutics, Inc.
Registration Statement on Form S-3
Filed August 16, 2022
File No. 333-266890

Dear Dr. Gupta:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Christine Westbrook at 202-551-5019 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Jeffrey Fessler, Esq.