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

POST EFFECTIVE AMENDMENT NO. 1 TO FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Unicycive Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	81-3638692
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

4300 El Camino Real, Suite 210 Los Altos, CA 94022 (650) 351-4495

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Shalabh Gupta, M.D. **Chief Executive Officer** Unicycive Therapeutics, Inc. 4300 El Camino Real, Suite 210 Los Altos, CA 94022 (650) 351-4495

(Name, address, including zip code, and telephone number, including area code, of agent for service)

With copies to:

Jeffrey J. Fessler, Esq. Greg Carney, Esq. 30 Rockefeller Plaza New York, NY 10112 Tel: (212) 653-8700 Fax: (212) 653-8701

Sheppard, Mullin, Richter & Hampton LLP Approximate date of commencement of proposed sale to the public: From time to time, after the effective date of this registration statement. If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \square If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. \square If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer □ Accelerated filer

Non-accelerated filer ⊠ Smaller reporting company ⊠ Emerging growth company ⊠

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act. \square

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

TERMINATION OF REGISTRATION STATEMENT AND DEREGISTRATION OF UNSOLD SECURITIES

Unicycive Therapeutics, Inc. (the "Registrant") is filing with the U.S. Securities and Exchange Commission (the "Commission") this post-effective amendment to deregister all unsold securities of the Registrant, previously registered under the following Registration Statement on Form S-3 (the "Registration Statement"), together with any other unsold securities registered thereunder:

 Registration No. 333-266890 filed with the Commission on August 16, 2022 and declared effective on August 24, 2022, which registered \$50,000,000 worth of the Registrant's securities.

Through November 12, 2024, the Registrant sold \$78,774 of its securities under the Registration Statement. Accordingly, \$49,921,226 of securities (the "Unsold Securities") were not sold under the Registration Statement. Accordingly, in accordance with undertaking made by the Registrant in the Registration Statement to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering, the Registrant hereby removes and withdraws from registration all of the Unsold Securities. The Registration Statement is hereby amended, as appropriate, to reflect the deregistration of such securities.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, he registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3, and the registrant has duly caused this Post-Effective Amendment No. 1 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Los Altos, State of California, on November 13, 2024.

UNICYCIVE THERAPEUTICS, INC.

By: /s/ Shalabh Gupta

Shalabh Gupta Chief Executive Officer

Pursuant to the Rule 478 of the Securities Act of 1933, as amended, no other person is required to sign this Post-Effective Amendment No. 1 to registration Statement.