

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

**FORM 8-K**

**CURRENT REPORT**

**Pursuant to Section 13 or 15(d) of the  
Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): **August 9, 2024**

**MIRA PHARMACEUTICALS, INC.**

(Exact Name of Registrant as Specified in its Charter)

**Florida**

(State or Other Jurisdiction  
of Incorporation)

**001-41765**

(Commission  
File Number)

**85-3354547**

(IRS Employer  
Identification No.)

**1200 Brickell Avenue, Suite 1950 #1183  
Miami, Florida 33131**

(Address of Principal Executive Offices)

**(737) 289-0835**

(Registrant's telephone number, including area code)

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.0001 par value per share	MIRA	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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 13(a) of the Exchange Act.

**Item 8.01 Other Events**

*MIRA Pharmaceuticals Unveils Additional Preclinical Success*

MIRA Pharmaceuticals, Inc. (the "Company") unveiled promising preclinical data on Ketamir-2's principal metabolite, Nor-Ketamir – a longer acting, brain penetrating and selective compound acting on the NMDA Complex's PCP Receptor.

The Company recently received the results of new preclinical testing on its innovative drug candidate Ketamir-2 and its primary metabolite Nor-Ketamir-2. The new data reveals that Nor-Ketamir-2 selectively interacts with the NMDA PCP site while avoiding activity on the glutamate NMDA site. Additionally, a new salt formulation, Ketamir-2 Pamoate, has been developed to enhance pharmacokinetics, achieving nearly 100% oral bioavailability and improved brain penetration.

The Company is actively progressing with its IND-enabling regulatory work and Good Manufacturing Practice (GMP) drug scale-up. The Company's plan is to submit an Investigational New Drug (IND) application by the end of the year, aiming to initiate clinical trials. These advancements highlight the commitment to developing safer and more effective treatments, moving closer to bringing Ketamir-2 to market.

**Cautionary Note Regarding Forward Looking Statements**

This Current Report on Form 8-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Such forward-looking statements are characterized by future or conditional verbs such as "may," "will," "expect," "intend," "plans," "anticipate,"

“believe,” “estimate,” “continue” and similar words. Such statements are only predictions and actual events or results may differ materially from those anticipated in these forward-looking statements. You should not place undue reliance on any forward-looking statements. In this report, such forward-looking statements relate to the anticipated benefits of the Company’s preclinical testing results for, and the time for regulatory filings related to, Ketamir-2 or Nor-Ketamir-2. Readers are cautioned that actual future results related to Ketamir-2 or Nor-Ketamir-2 may deviate materially and adversely from the forward-looking statements regarding Ketamir-2 and Nor-Ketamir-2 contained herein. The Company does not assume any obligation to update forward-looking statements as circumstances change, except as required by securities laws. These and other risks concerning the Company’s programs and operations are described in additional detail in Annual Report on Form 10-K for the year ended December 31, 2023 and other SEC filings, which are on file with the SEC at [www.sec.gov](http://www.sec.gov) and the Company’s website at <https://www.mirapharmaceuticals.com/investors/sec-filings>. The Company explicitly disclaims any obligation to update any forward-looking statements except to the extent required by law.

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#### SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

#### MIRA PHARMACUTICALS, INC.

Dated: August 9, 2024

By: /s/ Erez Aminov  
Name: Erez Aminov  
Title: Chief Executive Officer

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