

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

**AMENDMENT NO. 4
TO
FORM S-1**

**REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

MIRA PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Florida
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

85-3354547
(I.R.S. Employer
Identification No.)

**855 N Wolfe Street, Suite 601
Baltimore, Maryland 21205
(737) 289-0835**

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

**Erez Aminov
Chief Executive Officer
MIRA Pharmaceuticals, Inc.
900 West Platt Street, Suite 200
Tampa, Florida 33606-2173
(737) 289-0835**

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

Copies of all communications, including communications sent to agent for service, should be sent to:

**Curt P. Creely
Neda Sharifi
Foley & Lardner LLP
100 North Tampa Street, Suite 2700
Tampa, Florida 33602
(813) 229-2300**

**Joseph M. Lucosky, Esq.
Lucosky Brookman LLP
101 Wood Avenue South, 5th Floor
Woodbridge, New Jersey 08830
(732) 395-4402**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

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, as amended (the "Securities Act"), 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.

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.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) 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.

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
Non-accelerated filer

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 the Securities Act.

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 which 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 Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Amendment No. 4 to the Registration Statement on Form S-1 of MIRA Pharmaceuticals, Inc. (the “Company”) (File No. 333-273024) is being filed solely to amend Item 13 of Part II. Accordingly, this amendment consists only of the facing page, this explanatory note, Part II of the registration statement, and the signature pages to the registration statement. The remainder of the registration statement is unchanged and has therefore been omitted.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth all the costs and expenses, other than underwriting discounts and commissions, to be paid by us in connection with the sale of the shares of common stock being registered hereby. All amounts shown below are estimates, except the SEC registration fee, the FINRA filing fee and the Nasdaq listing fee:

	Amount
SEC registration fee	\$ 3,086
FINRA filing fee	4,700
Nasdaq listing fee	5,000
Printing expenses	10,000
Legal fees and expenses	525,000
Accounting fees and expenses	50,000
Transfer agent and registrar fees and expenses	7,000
Miscellaneous expenses	78,350
Total	\$ 683,136

Item 14. Indemnification of Directors and Officers

MIRA Pharmaceuticals, Inc. is incorporated under the laws of the state of Florida. Section 607.0831 of the Florida Business Corporation Act, as amended (the “FBCA”), provides that a director is not personally liable for monetary damages to the corporation or any other person for any statement, vote, decision to take or not to take action, or any failure to take any action, as a director, unless (1) the director breached or failed to perform his or her duties as a director and (2) the director’s breach of, or failure to perform, those duties constitutes (a) a violation of the criminal law, unless the director had reasonable cause to believe his or her conduct was lawful or had no reasonable cause to believe his or her conduct was unlawful, (b) a transaction from which the director derived an improper personal benefit, either directly or indirectly, (c) a circumstance under which the liability provisions of Section 607.0834 of the FBCA are applicable, (d) in a proceeding by or in the right of the corporation to procure a judgment in its favor or by or in the right of a shareholder, conscious disregard for the best interest of the corporation, or willful or intentional misconduct, or (e) in a proceeding by or in the right of someone other than the corporation or a shareholder, recklessness or an act or omission which was committed in bad faith or with malicious purpose or in a manner exhibiting wanton and willful disregard of human rights, safety, or property. A judgment or other final adjudication against a director in any criminal proceeding for a violation of the criminal law estops that director from contesting the fact that his or her breach, or failure to perform, constitutes a violation of the criminal law; but does not estop the director from establishing that he or she had reasonable cause to believe that his or her conduct was lawful or had no reasonable cause to believe that his or her conduct was unlawful.

Under Section 607.0851 of the FBCA, a corporation has power to indemnify any person who is a party to any proceeding (other than an action by, or in the right of the corporation), because he or she is or was a director or officer of the corporation against liability incurred in connection with such proceeding, including any appeal thereof, if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any proceeding by judgment, order, settlement or conviction or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he or she reasonably believed to be in, or not opposed to, the best interests of the corporation or, with respect to any criminal action or proceeding, has reasonable cause to believe that his or her conduct was unlawful.

For purposes of the indemnification provisions of the FBCA, “director” or “officer” means an individual who is or was a director or officer, respectively, of a corporation or who, while a director or officer of the corporation, is or was serving at the corporation’s request as a director or officer, manager, partner, trustee, employee, or agent of another domestic or foreign corporation, limited liability company, partnership, joint venture, trust, employee benefit plan, or another enterprise or entity and the terms include, unless the context otherwise requires, the estate, heirs, executors, administrators, and personal representatives of a director or officer.

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In addition, under Section 607.0851 of the FBCA, a corporation has the power to indemnify any person, who was or is a party to any proceeding by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director or officer, against expenses and amounts paid in settlement not exceeding, in the judgment of the board of directors, the estimated expense of litigating the proceeding to conclusion, actually and reasonably incurred in connection with the defense or settlement of such proceeding, including any appeal thereof. Such indemnification shall be authorized if such person acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be made under this subsection in respect of any claim, issue, or matter as to which such person shall have been adjudged to be liable unless, and only to the extent that, the court in which such proceeding was brought, or any other court of competent jurisdiction, shall determine upon application that, despite the adjudication of liability but in view of all circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

Section 607.0852 of the FBCA provides that a corporation must indemnify an individual who is or was a director or officer who was wholly successful, on the merits or otherwise, in the defense of any proceeding to which the individual was a party because he or she is or was a director or officer of the corporation against expenses incurred by the individual in connection with the proceeding.

Section 607.0853 of the FBCA provides that a corporation may, before final disposition of a proceeding, advance funds to pay for or reimburse expenses incurred in connection with the proceeding by an individual who is a party to the proceeding because that individual is or was a director or an officer if the director or officer delivers to the corporation a signed written undertaking of the director or officer to repay any funds advanced if (a) the director or officer is not entitled to mandatory indemnification under Section 607.0852; and (b) it is ultimately determined under Section 607.0854 or Section 607.0855 (as described below) that the director or officer has not met the relevant standard of conduct described in Section 607.0851 or the director or officer is not entitled to indemnification under Section 607.0859 (as described below).

Section 607.0854 of the FBCA provides that, unless the corporation’s articles of incorporation provide otherwise, notwithstanding the failure of a corporation to provide indemnification, and despite any contrary determination of the board of directors or of the shareholders in the specific case, a director or officer of the corporation who is a party to a proceeding because he or she is or was a director or officer may apply for indemnification or an advance for expenses, or both, to a court having jurisdiction over the corporation which is conducting the proceeding, or to a circuit court of competent jurisdiction. Our amended and restated articles of incorporation do not provide any such exclusion. After receipt of an application and after giving any notice it considers necessary, the court may order indemnification or advancement of expenses upon certain

determinations of the court.

Section 607.0855 of the FBCA provides that, unless ordered by a court under Section 607.0854, a corporation may not indemnify a director or officer under Section 607.0851 unless authorized for a specific proceeding after a determination has been made that indemnification is permissible because the director or officer has met the relevant standard of conduct set forth in Section 607.0851.

Section 607.0857 of the FBCA also provides that a corporation shall have the power to purchase and maintain insurance on behalf of and for the benefit of any person who is or was a director or officer of the corporation against any liability asserted against the person and incurred by him or her in any such capacity or arising out of his or her status as such, whether or not the corporation would have the power to indemnify or advance expenses to the individual against such liability under the provisions of Section 607.0857.

Section 607.0858 of the FBCA provides that the indemnification provided pursuant to Section 607.0851 and Section 607.0852, and the advancement of expenses provided pursuant to Section 607.0853, are not exclusive. A corporation may, by a provision in its articles of incorporation, bylaws or any agreement, or by vote of shareholders or disinterested directors, or otherwise, obligate itself in advance of the act or omission giving rise to a proceeding to provide any other or further indemnification or advancement of expenses to any of its directors or officers.

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Section 607.0859 of the FBCA provides that, unless ordered by a court under the provisions of Section 607.0854 of the FBCA, a corporation may not indemnify a director or officer under Section 607.0851 or Section 607.0858, or advance expenses to a director or officer under Section 607.0853 or Section 607.0858, if a judgment or other final adjudication establishes that his or her actions, or omissions to act, were material to the cause of action so adjudicated and constitute: (a) willful or intentional misconduct or a conscious disregard for the best interests of the corporation in a proceeding by or in the right of the corporation to procure a judgment in its favor or in a proceeding by or in the right of a shareholder; (b) a transaction in which a director or officer derived an improper personal benefit; (c) a violation of the criminal law, unless the director or officer had reasonable cause to believe his or her conduct was lawful or had no reasonable cause to believe his or her conduct was unlawful; or (d) in the case of a director, a circumstance under which the liability provisions of Section 607.0834 are applicable (relating to unlawful distributions).

Our amended and restated articles of incorporation and bylaws provide that we shall indemnify any and all persons whom it shall have power to indemnify under the FBCA to the fullest extent permitted by law.

The underwriting agreement for this offering will provide that the underwriters indemnify us against certain civil liabilities that may be incurred in connection with this offering, including certain liabilities under the Securities Act of 1933.

We also maintain director and officer liability insurance against certain claims and liabilities which may be made against our former, current or future directors and officers. In addition, we have individual indemnification agreements with our directors.

Item 15. Recent Sales of Unregistered Securities

In the preceding three years, we have issued and sold the following securities that were not registered under the Securities Act:

1. From November 2021 to December 2022, we undertook a private placement solely to accredited investors pursuant to which we issued and sold an aggregate of 1,539,200 shares of our common stock at a price of \$5.00 per share, for an aggregate purchase price of approximately \$7.7 million to 90 investors.
2. In June 2022 and April 2023, we granted to 16 directors, employees, or other service providers stock options to purchase an aggregate of 1,000,000 shares of our common stock at an exercise price of \$5.00 per share pursuant to our 2022 Omnibus Plan.
3. In April 2023, we granted to Bay Shore Trust a warrant to purchase up to 1,000,000 shares of our common stock at an exercise price of \$5.00 per share in consideration of making a credit facility available to the Company.

We claimed exemption from registration under the Securities Act of 1933, as amended, or the Securities Act, for the sale and issuance of securities in the transaction described in paragraphs 1 and 3 above by virtue of Section 4(a)(2) and/or Regulation D promulgated thereunder as a transaction not involving any public offering. All the purchasers of unregistered securities for which we relied on Section 4(a)(2) and/or Regulation D represented that they were accredited investors as defined in Rule 501(a) under the Securities Act. We claimed such exemption on the basis that (a) the purchasers in each case represented that they intended to acquire the securities for investment only and not with a view to the distribution thereof and that they either received adequate information about the registrant or had access, through employment or other relationships, to such information and (b) appropriate legends were affixed to the stock certificates issued in such transactions.

We claimed exemption from registration under the Securities Act for the sales and issuances of securities in the transactions described in paragraph 2 above under Section 4(a)(2) of the Securities Act in that such sales and issuances did not involve a public offering or under Rule 701 promulgated under the Securities Act, in that they were offered and sold either pursuant to written compensatory plans or pursuant to a written contract relating to compensation, as provided by Rule 701.

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Item 16. Exhibits and Financial Statement Schedules

(A) *Exhibits.*

INDEX TO EXHIBITS

Exhibit No.	Exhibit Description
1.1 [^]	Form of Underwriting Agreement
3.1 [^]	Third Amended and Restated Articles of Incorporation of MIRA Pharmaceuticals, Inc.
3.2 [^]	Current Bylaws of MIRA Pharmaceuticals, Inc.
3.3 [^]	Amended and Restated Bylaws of MIRA Pharmaceuticals, Inc., to be in effect upon the completion of this offering.
4.1 [^]	Form of Representative's Warrant
4.2 [^]	Common Stock Purchase Warrant, dated April 28, 2023, between MIRA Pharmaceuticals, Inc. and Bay Shore Trust
5.1 [^]	Opinion of Foley & Lardner LLP
10.1+ [^]	2022 Omnibus Incentive Plan, as amended and restated.
10.2+ [^]	Form of Stock Option Award under 2022 Omnibus Incentive Plan
10.3 [^]	Form of Indemnification Agreement
10.4 [^]	Confirmatory Patent Assignment and Royalty Agreement, dated November 1, 2021, between SRQ Patent Holdings II, LLC and MIRA Pharmaceuticals, Inc.
10.5 [^]	Amended and Restated Limited License Agreement, dated June 27, 2022, between MIRA Pharmaceuticals, Inc. and MyMD Pharmaceuticals, Inc.

10.6 [^]	Amendment No. 1, dated April 20, 2023, to Amended and Restated Limited License Agreement between MIRA Pharmaceuticals, Inc. and MyMD Pharmaceuticals, Inc.
10.7 ^{+^}	Employment Agreement, dated April 28, 2023, between MIRA Pharmaceuticals, Inc. and Erez Aminov
10.8 ^{+^}	Employment Agreement, dated April 28, 2023, between MIRA Pharmaceuticals, Inc. and Michele Yanez
10.9 ^{+^}	Employment Agreement between MIRA Pharmaceuticals, Inc. and Chris Chapman to become effective upon the completion of this offering
10.10 [^]	Promissory Note and Loan Agreement, dated April 28, 2023, between MIRA Pharmaceuticals, Inc. and Bay Shore Trust
10.11 [^]	Registration Rights Agreement, dated April 28, 2023, between MIRA Pharmaceuticals, Inc. and Bay Shore Trust
10.12 [^]	Agreement for Shared Lease Costs, dated April 1, 2023, between MIRA Pharmaceuticals, Inc., Telomir Pharmaceuticals, Inc., and MIRALOGX LLC.
10.13 [^]	Master Collaboration Agreement, dated November 1, 2021, between MIRA Pharmaceuticals, Inc. and The Johns Hopkins University
10.14 [^]	Conversion Agreement, dated July 20, 2023, between MIRA Pharmaceuticals, Inc. and the Bay Shore Trust.
14.1 [^]	Code of Business Conduct and Ethics
21.1 [^]	List of Subsidiaries of Registrant
23.1 [^]	Consent of Cherry Bekaert LLP
23.2 [^]	Consent of Foley & Lardner LLP (included in Exhibit 5.1)
24.1 [^]	Power of Attorney
99.1 [^]	Audit Committee Charter
99.2 [^]	Nominating and Corporate Governance Committee Charter
99.3 [^]	Compensation Committee Charter
99.4 [^]	Corporate Governance Guidelines
99.5 [^]	Insider Trading Policy
99.6 [^]	Related Person Transaction Policy and Procedures
107 [^]	Filing Fee Table

[^] Previously filed.

⁺ Denotes management contract or compensatory plan or arrangement.

(B) *Financial Statement Schedules.*

Not applicable.

Item 17. Undertakings

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended.

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) 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 undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Amendment No. 4 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Tampa, Florida, on this 25th day of July, 2023.

MIRA PHARMACEUTICALS, INC.

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

Pursuant to the requirements of the Securities Act of 1933, as amended, this Amendment No. 4 to the Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Erez Aminov</u> Erez Aminov	Chief Executive Officer (Principal Executive Officer)	July 25, 2023
<u>*</u> Michelle Yanez	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	July 25, 2023
<u>*</u> Chris Chapman	Executive Chairman and Director	July 25, 2023
<u>*</u> Christos Nicholoudis, Esq.	Director	July 25, 2023
<u>*</u> Dave Vorhoff	Director	July 25, 2023
<u>*</u> Brad Kroenig	Director	July 25, 2023
<u>*</u> Talhia Tuck	Director	July 25, 2023
<u>*</u> Hugh McColl III	Director	July 25, 2023

*By: /s/ Erez Aminov
Erez Aminov
Attorney-in-Fact