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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2024

□ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____to _____

Commission file number 001-41765

MIRA Pharmaceuticals, Inc.
(Exact name of registrant as specified in its charter)

Florida	**85-3354547**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
1200 Brickell Avenue, Suite 1950 #1183 Miami, Florida	
(Address of principal executive offices)	**33131 (Zip Code)**

Registrant's telephone number (including area code):
(786) 432-9792

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

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, par value $0.0001 per share	**MIRA**	**The Nasdaq Stock Market LLC**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes □ No ☒

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No □

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 definition 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 13(a) of the Exchange Act. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes □ No ☒

As of May 13, 2024, there were 14,780,885 shares of company common stock issued and outstanding.

MIRA Pharmaceuticals, Inc.
Quarterly Report on Form 10-Q
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MIRA PHARMACEUTICALS, INC.
CONDENSED BALANCE SHEETS
AS OF MARCH 31, 2024 AND DECEMBER 31, 2023

	March 31, 2024 (Unaudited)	December 31, 2023
ASSETS		
Current assets:		
Cash	$ 3,528,695	$ 4,602,566
Other Receivables	-	11,862
Prepaid expenses	185,336	243,802
Total current assets	3,714,031	4,858,230
Operating lease, right of use assets	1,273	5,061
Due from related parties	93,487	69,152
Total assets	**$ 3,808,791**	**$ 4,932,443**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Trade accounts payable	$ 636,261	$ 538,564
Related party accrued interest	14,472	14,472
Current portion of operating lease liabilities	1,273	5,061
Total current liabilities	652,006	558,097
Total liabilities	652,006	558,097
Stockholders' equity		
Preferred Stock, $0.0001 par value, 10,000,000 shares authorized and none issued or outstanding.	-	-
Common Stock, $0.0001 par value; 100,000,000 shares authorized, 14,780,885 shares issued and outstanding at March 31, 2024 and December 31, 2023, respectively.	1,478	1,478
Additional paid-in capital	26,158,140	25,657,930
Accumulated deficit	(23,002,833)	(21,285,062)
Total stockholders' equity	3,156,785	4,374,346
Total liabilities and stockholders' equity	**$ 3,808,791**	**$ 4,932,443**

See notes to condensed financial statements

MIRA PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF OPERATIONS
FOR THE THREE MONTHS ENDED MARCH 31, 2024 AND 2023
(Unaudited)

	Three months ended March 31,	
	2024	**2023**
Revenues	$ -	$ -
Operating costs:		
General and administrative expenses	1,005,911	614,235
Related party travel costs	-	453,550
Research and development expenses	762,276	271,606
Total operating costs	1,768,187	1,339,391
Interest income (expense), net	50,416	(1,653)
Net loss attributable to common stockholders	**$ (1,717,771)**	**$ (1,341,044)**
Basic and diluted loss per share	$ (0.12)	$ (0.10)
Weighted average common stock shares outstanding	19,707,847	17,750,667

See notes to condensed financial statements

MIRA PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF STOCKHOLDERS' EQUITY
FOR THE THREE MONTHS ENDED MARCH 31, 2024 AND 2023
(Unaudited)

	Common Stock		Additional Paid-In	Accumulated	Total Stockholders' Equity
	Shares	Amount	Capital	Deficit	(Deficit)
Balances, January 1, 2023	**13,313,000**	**$ 6,657**	**$ 8,699,830**	**$ (9,302,717)**	**$ (596,230)**
Stock-based compensation	-	-	147,800	-	147,800
Net loss	-	-	-	(1,341,044)	(1,341,044)
Balances, March 31, 2023	**13,313,000**	**$ 6,657**	**$ 8,847,630**	**$ (10,643,761)**	**$ (1,789,474)**
Balances, January 1, 2024	**14,780,885**	**1,478**	**$ 25,657,930**	**$ (21,285,062)**	**$ 4,374,346**
Stock-based compensation	-	-	500,210	-	500,210
Net loss	-	-	-	(1,717,771)	(1,717,771)
Balances, March 31, 2024	**14,780,885**	**1,478**	**$ 26,158,140**	**$ (23,002,833)**	**$ 3,156,785**

See notes to condensed financial statements

MIRA PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF CASH FLOWS
FOR THE THREE MONTHS ENDED MARCH 31, 2024 AND 2023
(Unaudited)

	Three Months Ended March 31,	
	2024	**2023**
Cash flows from Operating activities		
Net loss	$ (1,717,771)	$ (1,341,044)
Adjustments to reconcile net loss to net cash from operations		
Interest expense	-	1,653
Stock-based compensation expense	500,210	147,800
Change in operating assets and liabilities:		
Trade accounts payable and accrued expenses	97,697	176,316
Prepaid expenses	58,466	(60,031)
Other receivables	11,862	-
Net cash flows from operating activities	(1,049,536)	(1,075,306)
Financing activities:		
Advances (to) from affiliates	(24,335)	685,458
Payment of deferred offering costs	-	(46,261)
Borrowings under related party line of credit	-	86,480
Net cash flows from financing activities	(24,335)	725,677
Net change in cash	(1,073,871)	(349,629)
Cash, beginning of year	4,602,566	350,978
Cash, end of period	**$ 3,528,695**	**$ 1,349**
Cash paid for interest	-	-

See notes to condensed financial statements

MIRA PHARMACEUTICALS, INC.
NOTES TO CONDENSED FINANCIAL STATEMENTS
FOR THE THREE MONTHS ENDED MARCH 31, 2024 AND 2023
(Unaudited)

Note 1. Description of business and summary of significant accounting policies:

Overview

MIRA Pharmaceuticals, Inc., a Florida corporation ("we," "us," "our," "MIRA," or the "Company"), is a pre-clinical-stage pharmaceutical development company with two neuroscience programs targeting a broad range of neurologic and neuropsychiatric disorders. We hold exclusive license rights in the U.S., Canada and Mexico for Ketamir-2, a novel, patent pending oral ketamine analog under pre-clinical investigation to potentially deliver ultra-rapid antidepressant effects, providing hope for individuals battling treatment-resistant depression ("TRD"), major depressive disorder with suicidal ideation (MDSI), and potentially post-traumatic stress disorder ("PTSD").

Additionally, our novel oral pharmaceutical marijuana, MIRA-55, is currently under investigation for its potential to alleviate neuropathic pain, as well as anxiety and cognitive decline, symptoms often associated with early-stage dementia. MIRA-55, if approved by the U.S. Food and Drug Administration ("FDA"), could mark a significant advancement in addressing various neuropsychiatric, inflammatory, and neurologic diseases and disorders.

The U.S. Drug Enforcement Administration's ("DEA") scientific review of Ketamir-2 concluded that it would not be considered a controlled substance or listed chemical under the Controlled Substances Act ("CSA") and its governing regulations. Additionally, we have submitted the required paperwork for MIRA-55 to be evaluated by the DEA.

We were incorporated under the laws of the State of Florida in September 2020 and commenced substantive operations, including our pharmaceutical development program, in late 2020.

Our accounting and reporting policies conform to accounting principles generally accepted in the United States of America ("GAAP").

As used herein, the Company's Common Stock, par value $0.0001 per share, is referred to as the "Common Stock" and the Company's preferred stock, par value $0.0001 per share, is referred to as the "Preferred Stock".

Operating updates

In early February 2024, we made a significant discovery during the manufacturing and scale-up process of our patented molecule known as "MIRA1a," which we believed was the molecule used in our pre-clinical trials and had been synthesized by a contract manufacturer. Through this process, we identified a novel and improved version of the molecule, which we call MIRA-55.

As part of our due diligence and subsequent testing, which began in late 2023, we discovered that the pre-clinical studies we conducted, previously attributed to MIRA1a, were in fact performed on MIRA-55. Following this revelation, in early March 2024, we promptly filed a provisional patent for MIRA-55, which encompasses all pre-clinical studies disclosed in our two registration statements on Form S-1, declared effective on August 2, 2023 and December 27, 2023 (File Nos. 333-273024 and 333-276118, respectively). If such patent is issued, we would own the patent rights to both MIRA1a and MIRA-55.

Moreover, based on our pre-clinical analyses to date, we believe that MIRA-55 is an improvement over MIRA1a in that it displays enhanced potency and potential for efficacy.

Additional testing is required to confirm our preliminary beliefs. However, based on our discoveries to date, we have decided to advance MIRA-55 as our lead compound for our oral pharmaceutical marijuana drug candidate while still retaining our rights to MIRA1a. As such, we do not intend to move MIRA1a forward as of the date of this Quarterly Report on Form 10-Q for the period ended March 31, 2024 (this "Report").

Initial public offering

On August 7, 2023, the Company closed its initial public offering consisting of 1,275,000 shares at a price of $7.00 per share for approximately $8.9 million in gross proceeds. After deducting the underwriting commission and other deferred offering expenses totaling $1.2 million, the net proceeds to the Company were $7.7 million (the "IPO").

The shares were offered and sold pursuant to the Company's Registration Statement on Form S-1, as amended (File No. 333-273024), originally filed with the Securities and Exchange Commission (the "SEC") on June 29, 2023 (the "Registration Statement") and the final prospectuses filed with the SEC pursuant to Rule 424(b) of the Securities Act of 1933, as amended. The Registration Statement was declared effective by the SEC on August 2, 2023. The common stock began trading on The Nasdaq Capital Market on August 3, 2023, under the symbol "MIRA". The closing of the IPO occurred on August 7, 2023.

Income taxes

The Company is taxed as a C corporation. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amount of existing assets and liabilities and their respective tax bases. Deferred tax assets are recognized for temporary differences that will result in deductible amounts in future years and for loss carryovers. A valuation allowance is recognized regarding deferred tax assets, if any, if it is more likely than not that some portion of the deferred tax asset will not be realized.

Research and development expenses

Research and development costs are expensed in the period in which they are incurred and include the expenses paid to third parties, such as contract research organizations and consultants, who conduct research and development activities on behalf of the Company. Patent-related costs, including registration costs, documentation costs and other legal fees associated with the application, are expensed in the period in which they are incurred.

Leases

The Company accounts for leases under the provisions of FASB ASC Topic 842, "Leases", which requires the Company to recognize right-to-use ("ROU") assets and lease liabilities for operating leases on the balance sheet.

Use of estimates

The preparation of financial statements in accordance with generally accepted accounting principles in the United States of America requires the Company's management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and the disclosure of 270-10t assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results may differ from such estimates and such differences could be material.

Cash

The Company maintains cash balances with financial institutions that management believes are of high credit quality. The Company's cash account at times may exceed federally insured limits. The Company has not experienced any losses in such accounts. The Company believes it is not exposed to any significant credit risk from its cash account.

Stock-based compensation

The Company accounts for stock-based compensation under the provisions of FASB ASC 718, "*Compensation - Stock Compensation*", which requires the measurement and recognition of compensation expense for all stock-based awards made to employees, directors and consultants based on estimated fair values on the grant date. The Company estimates the fair value of stock-based awards on the date of grant using the Black-Scholes model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods using the straight-line method. The Company has elected to account for forfeiture of stock-based awards as they occur.

Fair Value of Financial Instruments

The Company measures the fair value of financial instruments in accordance with GAAP which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements.

GAAP defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. GAAP also establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The Company considers the carrying amount of deferred offering costs to approximate fair value due to short-term nature of this instrument. GAAP describes three levels of inputs that may be used to measure fair value:

Level 1 – quoted prices in active markets for identical assets or liabilities.
Level 2 – quoted prices for similar assets and liabilities in active markets or inputs that are observable.
Level 3 – inputs that are unobservable (for example cash flow modeling inputs based on assumptions).

Note 2. Liquidity and capital resources:

In accordance with *Accounting Standards Codification 205-40, Going Concern*, the Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the financial statements are issued. As of March 31, 2024, the Company had cash of approximately $3.5 million. The Company used approximately $1.0 million of cash in operations during the three months ended March 31, 2024, and had stockholders' equity of approximately $3.2 million, versus stockholders' equity of approximately $4.4 million at December 31, 2023

Historically, the Company has been primarily engaged in developing MIRA-55 and, more recently, has also been focusing on the development of Ketamir-2. During these activities, the Company sustained substantial losses. The Company's ability to fund ongoing operations and future pre-clinical and clinical trials required for FDA approval is dependent on the Company's ability to obtain significant additional external funding in the near term. Since inception, the Company financed its operations through the sale of Common Stock, the IPO and related party financings. Additional sources of financing are being sought by the Company, which are described below. The Company expects to be able to fund operations through the fourth quarter of 2024, with available borrowings from the related-party loan described in Note 4 below. Additional financing will be needed by the Company to fund its operations after such date to continue and complete pre-clinical and clinical development activities and to commercially develop and ultimately launch its product candidates. However, and particularly given the early-stage nature of the Company and the significant time and capital required to implement the Company's business plan, there can be no assurance that any fundraising will be achieved on commercially reasonable terms, if at all.

The Company expects to continue to generate losses in the foreseeable future. The Company's liquidity needs will be determined largely by the budgeted operational expenditures incurred in regard to the progression of its product candidates. The Company does not have sufficient cash and cash equivalents as of the date of filing this Report to support its operations for at least the 12 months following the date the financial statements are issued. These conditions raise substantial doubt about the Company's ability to continue as a going concern through 12 months after the date the accompanying financial statements are issued.

To alleviate the conditions that raise substantial doubt about the Company's ability to continue as a going concern, the Company plans to secure additional capital, potentially through a combination of public or private equity offerings and strategic transactions, including potential alliances and drug product collaborations; however, none of these alternatives are committed at this time. There can be no assurance that the Company will be successful in obtaining sufficient funding on terms acceptable to it to fund continuing operations, if at all, identify and enter into any strategic transactions that will provide the capital that it will require or achieve the other strategies to alleviate the conditions that raise substantial doubt about the Company's ability to continue as a going concern. If none of these alternatives are available, or if available, are not available on satisfactory terms, the Company will not have sufficient cash resources and liquidity to fund its business operations for at least the 12 months following the date the financial statements are issued. The failure to obtain sufficient capital on acceptable terms when needed may require the Company to delay, limit, or eliminate the development of business opportunities and its ability to achieve its business objectives and its competitiveness, and its business, financial condition, and results of operations will be materially adversely affected, or, in the worst case scenario, the Company could be forced to cease operations and dissolve. In addition, the perception that the Company may not be able to continue as a going concern may cause others to choose not to deal with it due to concerns about its ability to meet its contractual obligations.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business, and do not include any adjustments relating to recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

Note 3. License agreement, related party:

MIRALOGX

On November 15, 2023, the Company and MIRALOGX, LLC, a Florida limited liability company ("MIRALOGX") which is a related-party owned by Bay Shore Trust, a significant stockholder of the Company ("Bay Shore Trust"), entered into an exclusive license agreement (the "License Agreement") to develop and commercialize Ketamir-2, a drug product containing 2-(2- chlorophenyl)-2-(methylamino) cyclopentan-1-one as an active agent in the United States, Canada and Mexico (the "Territory"). The exclusive license in the License Agreement includes the right of the Company to sublicense the licensed intellectual property.

Pursuant to the terms of the License Agreement, and subject to the conditions set forth therein, the Company paid MIRALOGX a one-time, nonrefundable payment of $0.1 million upon the signing of the Agreement and will be obligated to pay quarterly royalty payments on sales of the Ketamir-2 in the Territory of 8% of net sales and 8% of other revenue (such as milestone or sublicense payments) from licensed products.

Also, in consideration of the License Agreement, the Company issued to MIRALOGX a Common Stock Purchase Warrant to purchase up to 700,000 shares of the Company's common stock (the "MIRALOGX Warrant"). The MIRALOGX Warrant is exercisable, in whole or in part, any time prior to November 15, 2028 at a cash exercise price of $2.00 per share.

The Company and MIRALOGX have made customary representations and warranties in the License Agreement and have agreed to certain other customary covenants, including confidentiality, cooperation, and indemnity provisions. Either party may terminate the License Agreement for cause if the other party materially breaches or defaults in the performance of its obligations, and, if curable, such material breach remains uncured for 120 days. Unless earlier terminated, the License Agreement will continue in effect until the last to expire of the patent rights licensed pursuant to the License Agreement, unless earlier terminated.

The Company, Bay Shore Trust and MIRALOGX have the same grantor or founder, as the case may be.

Note 4. Debt, related party:

MIRALOGX

On November 15, 2023, the Company entered into a Promissory Note and Loan Agreement (the "Loan Agreement") with MIRALOGX.

Pursuant to the Loan Agreement, the Company may borrow up to $3.0 million from MIRALOGX to fund the development of licensed products under the License Agreement (the "Loan").

Together with any Advance Request, the Company shall deliver to the Lender a budget for the requested Advance (the "Budget"). The Budget may only include costs directly associated with preparing an Investigational New Drug ("IND") application for Ketamir-2, exclusive of personnel costs. Any Advances made by MIRALOGX to the Company pursuant to this Loan may be repaid by the Company (together with any and all interest accrued thereon) at any time without penalty or premium in accordance with the terms hereof. Amounts repaid under the Loan may not be reborrowed.

The Loan Agreement has a one-year term, and all outstanding principal and accrued but unpaid interest must be repaid in full on November 15, 2024. Interest on the amounts borrowed under the Loan Agreement accrues at an annual fixed rate of 8%. The Company may prepay all or a portion of the outstanding principal and accrued unpaid interest under the Loan Agreement at any time without a prepayment fee. The Company has not borrowed any funds from the MIRALOGX loan as of March 31, 2024.

Bay Shore Trust

In April 2023, the Company entered into a Promissory Note and Loan Agreement with the Bay Shore Trust. Under this Promissory Note and Loan Agreement (the "Bay Shore Note"), the Company had the right to borrow up to an aggregate of $5 million from the Bay Shore Trust at any time up to the second anniversary of the issuance of the Bay Shore Note or, if earlier, upon the completion of the Company's IPO. The Bay Shore Note accrued interest at a rate equal 7% per annum, simple interest, during the first year that the note was outstanding.

On July 20, 2023, the Company entered into a conversion agreement with the Bay Shore Trust under which the Bay Shore Trust had converted, at the time of the IPO, $1.1 million of the outstanding principal balance of the Bay Shore Note into shares of Common Stock at a conversion price equal to the price of the Common Stock sold to the public in the IPO, which resulted in the issuance of 157,170 shares of Common Stock to Bay Shore Trust. On August 14, 2023, the Company paid $1.0 million in full to Bay Shore Trust, which was the amount due. The Company also paid accrued interest of $0.03 million. There is a remaining amount of $0.01 million in accrued interest due to Bay Shore Trust as of March 31, 2024.

Note 5. Related party transactions:

Due from related parties – Amounts due from related parties as of March 31, 2024 and December 31, 2023, are recorded as related party accounts receivable, in the accompanying condensed balance sheets, which totaled $0.09 million and $0.07 million respectively. These aforementioned amounts are composed of accounts payable paid on behalf of a related party, specifically research and development payables.

Jet lease expenses – In April 2021, the Company entered into an airplane lease with an entity owned by Bay Shore Trust pursuant to which the Company incurred approximately $0.05 million of lease charges per month. The lease was renewable, at the Company's discretion, for an additional one to three years, however, the Company terminated the lease at March 31, 2023, without any penalties. During the three months ended March 31, 2023 the Company incurred $0.05 million, for travel-related expenses to the related party for monthly rental charges and airplane-related expenses. There was no such expense incurred for the same period in 2024.

License agreement - See Note 3.

Debt, related party - See Note 4.

Note 6. Leases:

The Company's corporate headquarters was formerly in Baltimore, Maryland, which included a lease for office space. This lease began in November 2021 and was amended in April 2023. The Company did not renew this lease. This space has a remaining base rent of $0.001 million payable through April 2024.

The Company also leased a jet (as described in Note 5) from a related party, which lease the Company terminated on March 31, 2023.

Variable lease costs

Variable lease costs primarily include utilities, property taxes, and other operating costs that are passed on from the lessor. Variable lease costs related to the aircraft include usage expenses, which includes pilot expenses, jet fuel and general flight expenses.

The components of lease expense were as follows:

	Three months ended March 31,	
Lease Costs	**2024**	**2023**
Operating Lease Cost		
Operating Lease	$ 3,819	$ 205,682
Variable Lease Costs	-	313,858
Total Lease Cost	$ 3,819	$ 519,540

Supplemental cash flow information related to leases were as follows:

	Three months ended March 31,	
Other Lease Information	**2024**	**2023**
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$ 3,819	$ 519,540

	Three months ended March 31,	
	2024	**2023**
Lease Term and Discount		
Weighted Average remaining lease term	0.33 years	0.53 years
Weighted Average discount rate	5.0%	5.0%

Maturity of Lease Liabilities

Future minimum lease payments under non-cancellable leases as of March 31, 2024 were as follows:

Maturity of Lease Liabilities

	March 31, 2024
Remainder of 2024	$ 1,273
Less: Interest	-
Present Value of Lease Liabilities	$ 1,273

On April 1, 2023 the Company entered into an Agreement For Shared Lease Costs with MIRALOGX (the “Shared Agreement”) for the jet usage (see Note 6). Under the Shared Agreement, the Company agreed to make monthly contributions or payments in accordance with its monthly use of shared aircraft toward rent payments. However, the Company has not used the aircraft after the termination of the lease and there are no minimum payments due without usage.

Note 7. Stockholders’ equity:

Capital stock

The Company has the authority to issue 110,000,000 shares of capital stock, consisting of 100,000,000 shares of Common Stock and 10,000,000 shares of undesignated Preferred Stock, whose rights and privileges will be defined by the Board of Directors when a series of Preferred Stock is designated.

Reverse Stock Split

Effective June 28, 2023, we completed a 1-for-5 reverse stock split of our outstanding Common Stock. Unless otherwise noted, the share and per share information in this Report reflects the reverse stock split.

Stock-based compensation

The fair value of each option award is estimated on the grant date using the Black-Scholes valuation model that uses assumptions for expected volatility, expected dividends, expected term, and the risk-free interest rate. Expected price volatility is based on the historical volatilities of a peer group as the Company does not have a multi-year trading history for its shares. Industry peers consist of several public companies in the biotech industry similar to the Company in size, stage of life cycle and product indications. The Company intends to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of the Company's own stock price becomes available, or unless circumstances change such that the identified companies are no longer similar to the Company, in which case, more suitable companies whose share prices are publicly available would be utilized in the calculation.

Expected term of options granted is derived using the "simplified method" which computes expected term as the average of the sum of the vesting term plus contract term. The risk-free rate is based on the 5-year U.S. Treasury yield curve in effect at the time of grant. The Company recognizes forfeitures as they occur.

During the three months ended March 31, 2024, a total of 725,000 options to purchase Common Stock, with an aggregate fair market value of approximately $0.8 million were granted to the members of the Company's Board of Directors, executive officers and consultants of the Company. Options have a term of 10 years from the grant date. These option vest as follows: (i) Board of Director and consultant options vested 50% at grant and remaining vest at anniversary of date of grant, and (ii) executive officer option grants vest 50% at 6 months from date of grant and at anniversary of grant date.

The following is option activity during the three months ended March 31, 2024.

	Number of shares	Weighted average exercise price per share	Aggregate intrinsic value
Outstanding as January 1, 2024	1,215,001	$ 5.00	
Options granted	725,000	$ 1.20	
Forfeitures	(151,667)	$ 5.00	
Outstanding as March 31, 2024	1,788,334	$ 4.07	$ -

The estimated fair value of stock options on date of grant was $0.8 million. As of March 31, 2024, options exercisable totaled 992,501. There are approximately $1.6 million of unrecognized compensation costs related to non-vested share-based compensation awards, which will be expensed through 2025.

Key assumptions used to value stock options during the three months ended March 31, 2024, are as follows:

Expected price volatility	151.17-152.45%
Risk-free interest rate	4.06-4.23%
Weighted average fair values	$ 1.065 - $1.484
Weighted average expected life in years	5-6 years
Dividend yield	-

Warrants

The Company has granted warrants to purchase shares of Common Stock. Warrants may be granted to affiliates in connection with certain agreements.

As of March 31, 2024, a cumulative total of 1,763,570 warrants, with exercise prices ranging from $2.00 to $7.00 remain exercisable and outstanding. There were no warrants granted or exercised during the three months ended March 31, 2024.

Earnings Per Share

During the three months ended March 31, 2024 and 2023, outstanding stock options and warrants of 3,703,571 and 750,000, respectively, were not included in the computation of diluted earnings per share, because to do so would have had an antidilutive effect.

Note 8. Subsequent events:

The Company's management has evaluated subsequent events through the date of issuance of the consolidated financial statements included herein. There have been no subsequent events that occurred during such period that would require disclosure in this Form 10-Q or would be required to be recognized in the consolidated financial statements as of and for the three months ended March 31, 2024.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Report contains "forward-looking statements" (as defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act) that reflect our current expectations and views of future events. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential", or "continue" or the negative of these terms or other similar expressions. In particular, statements about our pre-clinical and clinical trials and expectations regarding such trials, the markets in which we operate, including growth of such markets, and our expectations, beliefs, plans, strategies, objectives, prospects, assumptions, or future events or performance contained in this Report generally under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" are forward-looking statements.

We have based these forward-looking statements on our current expectations, assumptions, estimates and projections. While we believe these expectations, assumptions, estimates, and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond our control. These and other important factors, including those discussed in this Report under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" may cause our actual results, performance, or achievements to differ materially from any future results, performance or achievements expressed or implied by these forward-looking statements, or could affect our share price. Important factors that could cause actual results or events to differ materially from those expressed in forward-looking statements include, but are not limited to, the following:

- our reliance on related parties for potential funding and our license for Ketamir-2;
- our ability to obtain and maintain regulatory approval of our product candidates;
- our ability to successfully commercialize and market our product candidates, if approved;
- our ability to contract with third-party suppliers, manufacturers and other service providers and their ability to perform adequately;
- the potential market size, opportunity, and growth potential for our product candidates, if approved;

- our ability to obtain additional funding for our operations and development activities;
- the accuracy of our estimates regarding expenses, capital requirements and needs for additional financing;
- the initiation, timing, progress and results of our pre-clinical studies and clinical trials, and our research and development programs;
- the timing of anticipated regulatory filings;
- the timing of availability of data from our clinical trials;
- our future expenses, capital requirements, need for additional financing, and the period over which we believe that our existing cash and cash equivalents will be sufficient to fund our operating expenses and capital expenditure requirements;
- our ability to retain the continued service of our key professionals and to identify, hire and retain additional qualified professionals;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- our ability to recruit and enroll suitable patients in our clinical trials;
- the timing or likelihood of the accomplishment of various scientific, clinical, regulatory, and other product development objectives;
- the pricing and reimbursement of our product candidates, if approved;
- the rate and degree of market acceptance of our product candidates, if approved;
- the implementation of our business model and strategic plans for our business, product candidates, and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- developments relating to our competitors and our industry;
- the development of major public health concerns and the future impact of such concerns on our clinical trials, business operations and funding requirements; and
- other risks and factors listed under “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2023 and elsewhere in this Report.

Given the risks and uncertainties set forth in this Report, you are cautioned not to place undue reliance on such forward-looking statements. The forward-looking statements contained in this Report are not guarantees of future performance and our actual results of operations, financial condition, and liquidity, and the development of the industry in which we operate, may differ materially from the forward-looking statements contained in this Report. In addition, even if our results of operations, financial condition and liquidity, and events in the industry in which we operate, are consistent with the forward-looking statements contained in this Report, they may not be predictive of results or developments in future periods. In evaluating our business, you should carefully consider the information set forth under the heading “Risk Factors” included in our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on April 1, 2024.

Any forward-looking statement that we make in this Report speaks only as of the date of such statement. Except as required by federal securities laws, we do not undertake any obligation to update or revise, or to publicly announce any update or revision to, any of the forward-looking statements, whether as a result of new information, future events or otherwise, after the date of this Report.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis should be read in conjunction with the Condensed Financial Statements and Notes thereto included elsewhere in this Report. This discussion contains certain forward-looking statements that involve risks and uncertainties. The Company's actual results and the timing of certain events could differ materially from those discussed in these forward-looking statements as a result of certain factors, including, but not limited to, those set forth herein and elsewhere in this Report and in the Company's other filings with the SEC. See "Cautionary Note Regarding Forward Looking Statements" above.

As used in this Management's Discussion and Analysis of Financial Condition and Results of Operations, unless otherwise indicated, the terms "the Company", "we", "us", "our" and similar terminology refer to MIRA Pharmaceuticals, Inc.

Background of the Company

We are a pre-clinical-stage pharmaceutical development company with two neuroscience programs targeting a broad range of neurologic and neuropsychiatric disorders. We hold exclusive license rights in the U.S., Canada and Mexico for ***Ketamir-2***, a novel, patent pending oral ketamine analog under pre-clinical investigation to potentially deliver ultra-rapid antidepressant effects, providing hope for individuals battling TRD, MDSI and potentially PTSD.

Additionally, our novel oral pharmaceutical marijuana molecule, ***MIRA-55***, is being studied for its potential to alleviate neuropathic pain, as well as anxiety and cognitive decline, symptoms commonly associated with early-stage dementia. MIRA-55, if approved by the FDA, could mark a significant advancement in addressing various neuropsychiatric, inflammatory, and neurologic diseases and disorders.

The DEA's scientific review of Ketamir-2 concluded that it would not be considered a controlled substance or listed chemical under the CSA and its governing regulations. Additionally, we have submitted the required paperwork for MIRA-55 to be evaluated by the DEA.

We were incorporated under the laws of the State of Florida in September 2020 and commenced substantive operations, including our pharmaceutical development program, in late 2020.

Critical Accounting Estimates

See Note 1 of the Notes to Condensed Financial Statements included in Item 1 of this Report for a summary of significant accounting policies and information on recently issued accounting pronouncements.

Results of Operations

For the three months ended March 31, 2024 compared to the three months ended March 31, 2023

Research and Development Expenses. During the three months ended March 31, 2024, we incurred $0.8 million in research and development expenses, which were primarily related to initial payments for pre-clinical research projects for Ketamir. We incurred $0.3 million in research and development expenses during the three months ended March 31, 2023, relating to initial payment for toxicology study costs. Research and development expenses include pre-clinical, toxicology and consultant expenses.

General and Administrative Expenses. We incurred $1.0 million and $0.7 million in general and administrative expenses during the three months ended March 31, 2024 and March 31, 2023, respectively. General and administrative expenses are composed primarily of compensation, insurance, professional fees, stock-based compensation, administration and other related costs. The increase is primarily due to an increase in stock-based compensation.

Related Party Travel Costs. We incurred $0.5 million in related party travel costs during the three months ended March 31, 2023. Related party travel costs consisted of a lease and use of an airplane with an entity owned by Bay Shore Trust, a related party. The decrease in related party travel costs is due to the termination of the lease in March 2023. There was no such related party travel costs during the same period in 2024.

Interest income (expense), net. We earned $0.05 million in interest income, net during the three months ended March 31, 2024 and incurred $0.002 million interest expense, net during the three months March 31, 2023, respectively. Interest income during the three months ended March 31, 2024 consisted of interest earned on bank accounts. Interest expense during the three months ended March 31, 2023 consists of accrued interest on a related party line of credit.

Liquidity and Capital Resources

Sources of Liquidity and Going Concern

Since our inception in September 2020, we have financed our operations primarily through an unsecured line of credit with a major shareholder and an affiliated company, through a private placement of shares of our common stock that occurred during the fourth quarter 2021 and during 2022, and by the proceeds from our completed initial public offering in August 2023. We intend to finance our clinical development programs and working capital needs from existing cash, and potentially new sources of debt and equity financing. We may enter into new licensing and commercial partnership agreements.

Historically, we have been primarily engaged in developing MIRA-55 and, more recently, have also been focusing on the development of Ketamir-2. During these activities, we have sustained substantial losses. Our ability to fund ongoing operations and future pre-clinical and clinical trials required for FDA approval is dependent on our ability to obtain significant additional external funding in the near term. We expect to be able to fund operations through the fourth quarter of 2024, with available borrowings from the related-party loan described in Note 5 in the accompanying financial states. We will require additional financing to fund our operations, to continue and complete pre-clinical and clinical development activities and to commercially develop and ultimately launch our product candidates. However, and particularly given our early-stage nature and the significant time and capital required to implement our business plan, there can be no assurance that any fundraising will be achieved on commercially reasonable terms, if at all.

We expect to continue to generate losses in the foreseeable future. Our liquidity needs will be determined largely by the budgeted operational expenditure incurred in regard to the progression of our product candidates. We do not have sufficient cash and cash equivalents as of the date of filing this Report to support our operations for at least the 12 months. These conditions raise substantial doubt about our ability to continue as a going concern through 12 months after the date the financial statements included in this Report are issued.

To alleviate the conditions that raise substantial doubt about our ability to continue as a going concern, we plan to secure additional capital, potentially through a combination of public or private equity offerings and strategic transactions, including potential alliances and drug product collaborations; however, none of these alternatives are committed at this time. There can be no assurance that we will be successful in obtaining sufficient funding on terms acceptable to us to fund continuing operations, if at all, identify and enter into any strategic transactions that will provide the capital that we will require or achieve the other strategies to alleviate the conditions that raise substantial doubt about our ability to continue as a going concern. If none of these alternatives are available, or if they are not available on satisfactory terms, we will not have sufficient cash resources and liquidity to fund our business operations. The failure to obtain sufficient capital on acceptable terms when needed may require us to delay, limit, or eliminate the development of business opportunities and our ability to achieve our business objectives and our competitiveness, and our business, financial condition, and results of operations will be materially adversely affected, or, in the worst case scenario, we could be forced to cease operations and dissolve. In addition, the perception that we may not be able to continue as a going concern may cause others to choose not to deal with us due to concerns about its ability to meet our contractual obligations.

We did not have any material non-cancellable contractual obligations as of March 31, 2024.

Cash Flows

The following table provides information regarding our cash flows for the periods presented:

	Three months Ended March 31,	
	2024	**2023**
Net cash flows from:		
Operating activities	$ (1,049,536)	$ (1,075,306)
Financing activities	(24,335)	725,677
Net change in cash	$ (1,073,871)	$ (349,629)

Net Cash Flows from Operating Activities

The cash used in operating activities resulted primarily from our net losses, stock-based compensation expense, amortization of debt issuance costs and changes in components of accounts payable and accrued liabilities.

For the three months ended March 31, 2024, operating activities used $1.0 million of cash, primarily due to a net loss of $1.7 million, offset by $0.5 million in stock-based compensation expense and $0.2 million in accounts payable, accrued and prepaid expenses. Accounts payable, accrued and prepaid expenses were primarily composed of research and development payables, consultant costs, and insurance costs.

For the three months ended March 31, 2023, operating activities used $1.1 million of cash, primarily due to a net loss of $1.3 million and $0.06 million change in prepaid expenses, offset by $0.2 million in accounts payable and accrued expenses and $0.1 million in stock-based compensation expense. Accounts payable, accrued and prepaid expenses were primarily composed of research and development payables, consultant costs, insurance costs and legal expenses.

Net Cash Flows from Financing Activities

For the three months ended March 31, 2024, financing activities used $0.02 million of cash, resulting from $0.02 million in advances to affiliates.

For the three months ended March 31, 2023, financing activities provided $0.7 million of cash, resulting primarily from $0.7 million in advances from affiliates and $0.08 million of repayments under related party line of credit, offset by $0.05 million paid in deferred offering costs.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act, and therefore are not required to provide the information under this item per Item 305(e) of Regulation S-K.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Report, our management, with the participation of our Chief Executive Officer (our principal executive officer) and our Chief Financial Officer (our principal financial officer) (the "Certifying Officers"), conducted evaluations of our disclosure controls and procedures. As defined under Sections 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the term "disclosure controls and procedures" means controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the SEC. Disclosure controls and procedures include without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including the Certifying Officers, to allow timely decisions regarding required disclosures.

Readers are cautioned that our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will necessarily prevent all fraud and material error. An internal control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our control have been detected. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any control design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate.

Based on this evaluation, the Certifying Officers have concluded that our disclosure controls and procedures were not effective as of March 31, 2024.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act, during our first quarter of 2024 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Internal Controls

Our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met. Because of inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Our Chief Executive Officer and Chief Financial Officer have concluded, based on their evaluation as of the end of the period covered by this Report that our disclosure controls and procedures were not effective to provide reasonable assurance that the objectives of our disclosure control system were met.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may be named in claims arising in the ordinary course of business. Currently, no legal proceedings, government actions, administrative actions, investigations, or claims are pending against us or involve us that, in the opinion of our management, could reasonably be expected to have a material adverse effect on our business and financial condition.

We anticipate that we will expend significant financial and managerial resources in the defense of our intellectual property rights in the future if we believe that our rights have been violated. We also anticipate that we will expend significant financial and managerial resources to defend against claims that our products and services infringe upon the intellectual property rights of third parties.

Item 1A. Risk Factors.

As a smaller reporting company, information under this "Item 1A. Risk Factors" is not required to be presented.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None

Item 3. Defaults upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Not applicable.

Item 6. Exhibits.

Number	Description
3.1	Third Amended and Restated Articles of Incorporation of MIRA Pharmaceuticals, Inc. (incorporated by reference to Exhibit 3.1 of the Company's Registration Statement on Form S-1 (File No. 333-273024) filed with the SEC on June 29, 2023).
3.2	Amended and Restated Bylaws of MIRA Pharmaceuticals, Inc. (incorporated by reference to Exhibit 3.3 of the Company's Registration Statement on Form S-1, as amended (File No. 333-273024) filed with the SEC on July 28, 2023).
31.1*	Certification of Chief Executive Officer Pursuant to Sarbanes-Oxley Section 302
31.2*	Certification of Interim Chief Financial Officer Pursuant to Sarbanes-Oxley Section 302
32.1**	Certification Pursuant To 18 U.S.C. Section 1350 (*)
32.2**	Certification Pursuant To 18 U.S.C. Section 1350 (*)
101.ins*	Inline XBRL Instance Document
101.sch*	Inline XBRL Taxonomy Extension Schema Document
101.cal*	Inline XBRL Taxonomy Calculation Linkbase Document
101.def*	Inline XBRL Taxonomy Definition Linkbase Document
101.lab*	Inline XBRL Taxonomy Label Linkbase Document
101.pre*	Inline XBRL Taxonomy Presentation Linkbase Document
104*	The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, formatted in Inline XBRL.
*	Filed herewith.
**	Furnished herewith.

SIGNATURES

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

MIRA PHARMACEUTICALS, INC.

Date: May 13, 2024

By: */s/ Erez Aminov*
Erez Aminov
Chief Executive Officer
(Principal Executive Officer)

Date: May 13, 2024

By: */s/ Michelle Yanez*
Michelle Yanez
Chief Financial Officer, Treasurer and Secretary
(Principal Financial Officer)

Exhibit 31.1

Certification of Chief Executive Officer
Pursuant to Rule 13a-14(a)

I, Erez Aminov, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of MIRA PHARMACEUTICALS, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries as applicable, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2024

/s/ Erez Aminov
Erez Aminov
Chief Executive Officer

Exhibit 31.2

Certification of Chief Financial Officer
Pursuant to Rule 13a-14(a)

I, Michelle Yanez, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of MIRA PHARMACEUTICALS, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries as applicable, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2024

/s/ Michelle Yanez
Michelle Yanez
Chief Financial Officer, Treasurer and Secretary

Exhibit 32.1

MIRA PHARMACEUTICALS, INC.
CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of MIRA PHARMACEUTICALS, Inc. (the "Company") on Form 10-Q for the period ending March 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Erez Aminov, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. ss.1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Erez Aminov

Erez Aminov
Chief Executive Officer
May 13, 2024

Exhibit 32.2

MIRA PHARMACEUTICALS, INC.
CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of MIRA PHARMACEUTICALS, Inc. (the "Company") on Form 10-Q for the period ending March 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michelle Yanez, Chief Financial Officer, Treasurer and Secretary of the Company, certify, pursuant to 18 U.S.C. ss.1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Michelle Yanez

Michelle Yanez
Chief Financial Officer, Treasurer and Secretary
May 13, 2024