PHIO PHARMACEUTICALS CORP.

FORM 10-Q
(Quarterly Report)

Filed 05/15/25 for the Period Ending 03/31/25

Address	411 SWEDELAND ROAD SUITE 23-1080 KING OF PRUSSIA, PA, 19406
Telephone	(508) 767-3861
CIK	0001533040
Symbol	PHIO
SIC Code	2834 - Pharmaceutical Preparations
Industry	Biotechnology & Medical Research
Sector	Healthcare
Fiscal Year	12/31

Table of Contents

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

FORM 10-Q

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

For the quarterly period ended March 31, 2025

OR

☐ 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: 001-36304

Phio Pharmaceuticals Corp.
(Exact name of registrant as specified in its charter)

Delaware	**45-3215903**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

11 Apex Drive, Suite 300A, PMB 2006, Marlborough, MA 01752
(Address of principal executive office) (Zip code)

Registrant's telephone number, including area code: (508) 767-3861

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

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

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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

As of May 15, 2025, Phio Pharmaceuticals Corp. had 4,798,154 shares of common stock, $0.0001 par value, outstanding.

PHIO PHARMACEUTICALS CORP.
FORM 10-Q — QUARTER ENDED MARCH 31, 2025

INDEX

PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

PHIO PHARMACEUTICALS CORP.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Amounts in thousands, except share and per share data)

	(Unaudited) March 31, 2025	December 31, 2024
ASSETS		
Current assets:		
Cash and cash equivalents	$ 13,278	$ 5,382
Prepaid expenses and other current assets	158	354
Total current assets	13,436	5,736
Property and equipment, net	4	2
Total assets	$ 13,440	$ 5,738
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 427	$ 253
Accrued expenses	843	762
Total current liabilities	1,270	1,015
Total liabilities	1,270	1,015
Commitments and contingencies (Note 2)		
Stockholders' equity:		
Series D Preferred Stock, $0.0001 par value; 10,000,000 shares authorized, 0 issued and outstanding at March 31, 2025 and December 31, 2024	–	–
Common stock, $0.0001 par value, 100,000,000 shares authorized; 4,778,154 and 1,733,717 shares issued and outstanding at March 31, 2025 and December 31, 2024, respectively	–	–
Additional paid-in capital	160,295	151,079
Accumulated deficit	(148,125)	(146,356)
Total stockholders' equity	12,170	4,723
Total liabilities and stockholders' equity	$ 13,440	$ 5,738

The accompanying notes are an integral part of these condensed consolidated financial statements.

PHIO PHARMACEUTICALS CORP.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands, except share and per share data)
(Unaudited)

	Three Months Ended March 31,	
	2025	**2024**
Operating expenses:		
Research and development	$ 886	$ 1,148
General and administrative	986	1,061
Total operating expenses	1,872	2,209
Operating loss	(1,872)	(2,209)
Interest income, net	125	53
Other income (expense), net	(22)	2
Net loss	$ (1,769)	$ (2,154)
Net loss per common share:		
Basic and diluted	$ (0.41)	$ (0.47)
Weighted average number of common shares outstanding:		
Basic and diluted	4,307,264	4,580,072

The accompanying notes are an integral part of these condensed consolidated financial statements.

PHIO PHARMACEUTICALS CORP.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Amounts in thousands, except share data)
(Unaudited)

	Common Stock		Additional Paid-in	Accumulated	
For the Three Months Ended March 31, 2025	**Shares**	**Amount**	**Capital**	**Deficit**	**Total**
Balance at December 31, 2024	1,733,717	$ –	$ 151,079	$ (146,356)	$ 4,723
Issuance of common stock upon exercise of warrants	537,432	–	2,680	–	2,680
Issuance of common stock and warrants	2,507,005	–	6,493	–	6,493
Stock-based compensation expense	–	–	43	–	43
Net loss	–	–	–	(1,769)	(1,769)
Balance at March 31, 2025	4,778,154	$ –	$ 160,295	$ (148,125)	$ 12,170

	Common Stock		Additional Paid-in	Accumulated	
For the Three Months Ended March 31, 2024	**Shares**	**Amount**	**Capital**	**Deficit**	**Total**
Balance at December 31, 2023	3,747,329	$ –	$ 146,936	$ (139,206)	$ 7,730
Issuance of common stock upon exercise of warrants	826,370	–	–	–	–
Issuance of common stock upon vesting of restricted stock units	24,198	–	–	–	–
Shares withheld for payroll taxes	(6,197)	–	(4)	–	(4)
Stock-based compensation expense	–	–	32	–	32
Net loss	–	–	–	(2,154)	(2,154)
Balance at March 31, 2024	4,591,700	$ –	$ 146,964	$ (141,360)	$ 5,604

The accompanying notes are an integral part of these condensed consolidated financial statements.

PHIO PHARMACEUTICALS CORP.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)
(Unaudited)

	Three Months Ended March 31,	
	2025	**2024**
Cash flows from operating activities:		
Net loss	$ (1,769)	$ (2,154)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	–	1
Amortization of right of use asset	–	33
Loss on disposal of property and equipment	–	3
Stock-based compensation	43	32
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	196	459
Accounts payable	174	(337)
Accrued expenses	81	(13)
Lease liability	–	(35)
Net cash used in operating activities	(1,275)	(2,011)
Cash flows from investing activities:		
Cash paid for the purchase of property and equipment	(2)	–
Net cash used in investing activities	(2)	–
Cash flows from financing activities:		
Net proceeds from the issuance of common stock and warrants	6,493	–
Net proceeds from the exercise of warrants	2,680	–
Payment of taxes on net share settlements of restricted stock units	–	(4)
Net cash provided by (used in) financing activities	9,173	(4)
Net increase (decrease) in cash and cash equivalents	7,896	(2,015)
Cash and cash equivalents at the beginning of period	5,382	8,490
Cash and cash equivalents at the end of period	$ 13,278	$ 6,475

	2025	**2024**
Supplemental cash flow information		
Cash paid during the year for:		
Interest	$ –	$ 1

See accompanying notes to consolidated financial statements.

PHIO PHARMACEUTICALS CORP.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Organization and Significant Accounting Policies

Nature of Operations

Phio Pharmaceuticals Corp. ("**Phio**" or the "**Company**") is a clinical stage biopharmaceutical company whose proprietary INTASYL® self-delivering small interfering RNAi(siRNA) technology is designed to make immune cells more effective in killing tumor cells. The Company is developing therapeutics that are designed to leverage INTASYL to precisely target specific proteins that reduce the body's ability to fight cancer, without the need for specialized formulations or drug delivery systems. The Company is committed to discovering and developing innovative cancer treatments for patients by creating new pathways toward a cancer-free future.

Phio was incorporated in the state of Delaware in 2011 as RXi Pharmaceuticals Corporation. On November 19, 2018, the Company changed its name to Phio Pharmaceuticals Corp., to reflect its transition from a platform company to one that is fully committed to developing groundbreaking immuno-oncology therapeutics.

Basis of Presentation

The accompanying condensed consolidated financial statements are unaudited and have been prepared in accordance with accounting principles generally accepted in the United States ("**GAAP**"). Certain information and footnote disclosures that are included in the Company's annual consolidated financial statements, but that are not required for interim reporting purposes, have been condensed or omitted. In the opinion of management, the interim condensed consolidated financial statements reflect all adjustments necessary for a fair presentation of results for the periods presented.

These statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's most recent Annual Report on Form 10-K for the year ended December 31, 2024, as filed with the Securities and Exchange Commission (the "**SEC**") on March 31, 2025 (the "**2024 Form 10-K**"). Interim results are not necessarily indicative of results for a full year.

Principles of Consolidation

The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, MirImmune, LLC. All material intercompany accounts have been eliminated in consolidation.

Segments

The Company operates as one operating segment and all assets are located in the United States.

Reverse Stock Split

Effective July 5, 2024, the Company completed a 1-for-9 reverse stock split of the Company's outstanding common stock, including reclassifying an amount equal to the reduction in par value to additional paid-in capital. The reverse stock split did not reduce the number of authorized shares of the Company's common or preferred stock. All share and per share amounts have been adjusted to give effect to the reverse stock split.

Use of Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The areas subject to significant estimates and judgment include, among others, those related to the fair value of equity awards, accruals for research and development expenses, useful lives of property and equipment, and the valuation allowance on the Company's deferred tax assets. On an ongoing basis the Company evaluates its estimates and bases its estimates on historical experience and other relevant assumptions that the Company believes are reasonable under the circumstances. Actual results could differ materially from these estimates.

Liquidity

The Company has reported recurring losses from operations since its inception and expects to continue to have negative cash flows from operations for the foreseeable future. Historically, the Company's primary source of funding has been from sales of its securities. The Company's ability to continue to fund its operations is dependent on obtaining funding from third parties, such as proceeds from the issuance of debt, sale of equity, or strategic opportunities, in order to maintain its operations. This is dependent on a number of factors, including the market demand or liquidity of the Company's common stock. There is no guarantee that debt, additional equity or other funding will be available to the Company on acceptable terms, or at all. If the Company fails to obtain additional funding when needed, the Company would be forced to scale back or terminate its operations or seek to merge with or to be acquired by another company.

The Company has limited cash resources, has reported recurring losses from operations since inception, has negative operating cash flows and has not yet received product revenues. These factors raise substantial doubt regarding the Company's ability to continue as a going concern, and the Company's current cash resources may not provide sufficient capital to fund operations for at least the next 12 months from the date of the release of these condensed consolidated financial statements. The continuation of the Company as a going concern depends upon the Company's ability to raise additional capital through an equity offering, debt offering and/or strategic opportunity to fund its operations. There can be no assurance that the Company will be successful in accomplishing these plans in order to continue as a going concern. These condensed consolidated financial statements do not include any adjustments to the recoverability and classification of recorded asset amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

Summary of Significant Accounting Policies

Cash and Cash Equivalents

Cash and cash equivalents include unrestricted cash accounts, money market investments and highly liquid investment instruments with original maturity of three months or less at the date of purchase.

Other than as set forth above, there have been no material changes to the significant accounting policies disclosed in the Company's 2024 Form 10-K.

Recent Accounting Pronouncements

In December 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures," which requires public business entities to disclose additional information in specified categories with respect to the reconciliation of the effective tax rate to the statutory rate for federal, state, and foreign income taxes. It also requires greater detail about individual reconciling items in the rate reconciliation to the extent the impact of those items exceeds a specified threshold. In addition to new disclosures associated with the rate reconciliation, the ASU requires information pertaining to taxes paid (net of refunds received) to be disaggregated for federal, state, and foreign taxes and further disaggregated for specific jurisdictions to the extent the related amounts exceed a quantitative threshold. The ASU also describes items that need to be disaggregated based on their nature, which is determined by reference to the item's fundamental or essential characteristics, such as the transaction or event that triggered the establishment of the reconciling item and the activity with which the reconciling item is associated. The ASU eliminates the historic requirement that entities disclose information concerning unrecognized tax benefits having a reasonable possibility of significantly increasing or decreasing in the 12 months following the reporting date. This ASU is effective for annual periods beginning after December 15, 2024. Early adoption is permitted for annual financial statements that have not yet been issued or made available for issuance. This ASU should be applied on a prospective basis; however, retrospective application is permitted. The Company is currently evaluating the impact that ASU 2023-09 will have on its consolidated financial statements.

In November 2024, the FASB issued ASU 2024-03, "Income Statement - Reporting Comprehensive Income - Expense Disaggregation Disclosure (Subtopic 220-40): Disaggregation of Income Statement Expenses," which requires additional disclosure about the specific expense categories in the notes to financial statements at interim and annual reporting periods. The amendments in this ASU do not change or remove current expense disclosure requirements but affect where this information appears in the notes to financial statements. This ASU is effective for annual reporting periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027, with early adoption permitted. Upon adoption, the guidance can be applied prospectively or retrospectively. The Company is currently evaluating the impact that ASU 2024-03 will have on its consolidated financial statements.

2. Collaboration Agreement

*AgonOx, Inc. ("**AgonOx**")*

In February 2021, the Company entered into a clinical co-development collaboration agreement (the "**Clinical Co-Development Agreement**") with AgonOx, a private company developing a pipeline of novel immunotherapy drugs targeting key regulators of the immune response to cancer. Under the Clinical Co-Development Agreement, Phio and AgonOx were working to develop a T cell-based therapy using the Company's lead product candidate, PH-762, and AgonOx's "double positive" tumor infiltrating lymphocytes ("**DP TIL**") technology. Per the terms of the Clinical Co-Development Agreement, the Company agreed to reimburse AgonOx up to $4,000,000 in expenses incurred to conduct a Phase 1 clinical trial of PH-762 treated DP TIL in patients with advanced melanoma and other advanced solid tumors.

In May 2024, the Company terminated the Clinical Co-Development Agreement with AgonOx, effective immediately. Effective as of the date of termination, the Clinical Co-Development Agreement and the continuing obligations of the Company and AgonOx thereunder were terminated in their entirety. The Company is no longer required to provide financial support for the development costs incurred in the Clinical Co-Development Agreement and the Company is no longer entitled to future development milestones or royalty payments from AgonOx's licensing of its DP TIL technology.

The Company paid AgonOx all payment obligations that accrued prior to the termination of the Clinical Co-Development Agreement. Pursuant to the terms of the Clinical Co-Development Agreement, each of the Company and AgonOx were responsible for its own costs and expenses incurred in connection with the wind-down of the Phase 1 clinical trial. The Company made the remaining payment of $34,320, which primarily related to accrued obligations for patient fees and other miscellaneous costs as of the date of termination, to AgonOx on March 21, 2025. This settled all future obligations to AgonOx.

The Company did not recognize expense with respect to the Clinical Co-Development Agreement during the three months ended March 31, 2025. During the three months ending March 31, 2024, the Company recognized approximately $50,000 of expense with respect to the Clinical Co-Development Agreement.

3. Leases

The Company leases space for various corporate and research purposes. It is the Company's policy to apply the provisions of ASC 842 when accounting for arrangements that meet the criteria to be a lease. The Company calculates the lease liability as the present value of the lease's cash flows using the interest rate implicit in the lease, if determinable. If the rate implicit in the lease is not determinable, the Company uses its incremental borrowing rate. The incremental borrowing rate is defined as the rate the Company would have to pay to borrow on a collateralized basis over the lease term. The Company has elected the accounting policy election available under ASC 842 to not record a lease liability for leases with a term of less than one year.

From April 2014 to March 2024, the Company leased space that was utilized as its corporate headquarters and primary laboratory. The lease expired on March 31, 2024. On March 1, 2024, the Company commenced a lease for a laboratory facility located at 17 Briden Street, Worcester, Massachusetts. The lease had an original expiration date of August 31, 2024 and was subsequently extended through February 28, 2025. The Company continues to lease the space on a month-to-month basis. Monthly rent is approximately $2,500. In March 2025, the Company contracted with LifeSciences PA located at 411 Swedeland Road, King of Prussia, PA 19406 for access to full working space for normal hours of operations at a fee of $300 per month, which can be cancelled at any time.

Operating lease costs included in operating expense were approximately $8,400 and $33,000 for the three months ended March 31, 2025 and 2024, respectively.

Cash paid for the amounts included in the measurement of the operating lease liability on the Company's condensed consolidated balance sheets and included within changes in the lease liability in the operating activities of the Company's condensed consolidated statements of cash flows was $0 and $35,000 for the three months ended March 31, 2025 and 2024, respectively.

4. Stockholders' Equity

Financings

May 2024 Financing

On May 16, 2024, the Company entered into a purchase agreement (the "**Purchase Agreement**") with Triton Funds LP ("**Triton**"), pursuant to which the Company agreed to sell, and Triton agreed to purchase, upon the Company's request in one or more transactions, up to 95,833 shares of Common Stock at a purchase price of $6.48 per share (the "**Purchase Price**"), for aggregate gross proceeds of up to $621,000. The Company recorded expense of approximately $100,000, primarily related to legal fees, in connection with the execution of the Purchase Agreement with Triton. On July 3, 2024, the Company terminated the Purchase Agreement with Triton effective immediately. No shares of Common Stock were sold by the Company pursuant to the Purchase Agreement prior to termination.

July 2024 Financing

On July 11, 2024, the Company entered into inducement letter agreements (the "**July 2024 Inducement Letter Agreements**") with certain holders of certain of the Company's existing warrants to purchase up to an aggregate of 545,286 shares of Common Stock. The existing warrants were originally issued in February 2020 through December 2023, having exercise prices between $324.00 and $9.72 per share. Pursuant to the July 2024 Inducement Letter Agreements, these warrants were exercised for cash at a reduced exercise of $5.45 per share in consideration of the Company's agreement to issue new unregistered five and one-half year term Series C warrants to purchase up to 583,098 shares of Common Stock at an exercise price of $5.45 and new unregistered eighteen month term Series D warrants to purchase up to 507,474 shares of Common Stock at an exercise price of $5.45, both issued and sold at a price of $0.125 per warrant share (the "**July 2024 Financing**"). In addition, the Company issued warrants to H.C. Wainwright & Co., LLC (the "**Placement Agent**") to purchase a total of 40,896 shares of Common Stock at an exercise price of $6.8125 per share. The net proceeds to the Company from the July 2024 Financing were approximately $2,646,000, after deducting placement agent fees and offering expenses. The Company incurred non-cash equity issuance costs of approximately $2.4 million for the incremental fair value of the outstanding equity classified warrants and approximately $0.2 million for placement agent warrants.

Pursuant to the terms of the July 2024 Inducement Letter Agreements, in the event that the exercise of the existing warrants in the July 2024 Financing would have otherwise caused a holder to exceed the beneficial ownership limitations set forth in the existing warrant, the Company issued the number of shares that would not cause a holder to exceed such beneficial ownership limitation and agreed to hold such balance of shares of Common Stock in abeyance. Accordingly, an aggregate of 328,758 shares of Common Stock were held in abeyance (the "**July 2024 Abeyance Shares**") with such July 2024 Abeyance Shares evidenced through the holder's existing warrants and which are deemed to be prepaid. The July 2024 Abeyance Shares were held until notice was received by the holder that the balance of the shares of Common Stock could be issued in compliance with such beneficial ownership limitations and were exercised pursuant to a notice of exercise from the holder. Until such time, the Abeyance Shares were evidenced through the holder's existing warrants and have been included in the Company's table of outstanding warrants below. During the year ended December 31, 2024, all of the July 2024 Abeyance Shares were released.

December 19, 2024 Concurrent Registered Direct Offering and Private Placement

On December 19, 2024, the Company entered into a securities purchase agreement (the "**December 19, 2024 Securities Purchase Agreement**") with certain institutional and accredited investors in connection with a registered direct offering (the "**December 19, 2024 Registered Direct Offering**") and concurrent private placement (the "**December 19, 2024 Private Placement**" and, together with the December 19, 2024 Registered Direct Offering, the "**December 19, 2024 Offerings**"). The December 19, 2024 Offerings closed on December 20, 2024. The net proceeds to the Company from the December 19, 2024 Offerings were approximately $900,000, after deducting placement agent fees and offering expenses.

Pursuant to the December 19, 2024 Securities Purchase Agreement, the Company offered and sold in the December 19, 2024 Registered Direct Offering 437,192 shares of Common Stock at a purchase price of $2.635 per share. In the December 19, 2024 Private Placement, the Company also issued to such institutional and accredited investors unregistered warrants to purchase up to 437,192 shares of Common Stock (the "**Series E Warrants**"). Under the terms of the December 19, 2024 Securities Purchase Agreement, for each share of Common Stock issued in the December 19, 2024 Registered Direct Offering, an accompanying Series E Warrant was issued to the purchaser thereof. Each Series E Warrant is exercisable for one share of Common Stock at an exercise price of $2.51 per share and will expire on December 20, 2029. The Series E Warrants were offered and sold at a purchase price of $0.125 per Series E Warrant, which purchase price is included in the offering price per share of Common Stock issued in the December 19, 2024 Registered Direct Offering.

December 23, 2024 Concurrent Registered Direct Offering and Private Placement

On December 23, 2024, the Company entered into a securities purchase agreement (the "**December 23, 2024 Securities Purchase Agreement**") with certain institutional and accredited investors in connection with a registered direct public offering (the "**December 23, 2024 Registered Direct Offering**") and concurrent private placement (the "**December 23, 2024 Private Placement**" and, together with the December 23, 2024 Registered Direct Offering, the "**December 23, 2024 Offerings**" and, together with the December 19, 2024 Offerings, the "**December 2024 Offerings**"). The December 23, 2024 Offerings closed on December 24, 2024. The net proceeds to the Company from the December 23, 2024 Offerings were approximately $480,000, after deducting placement agent fees and offering expenses.

Pursuant to the December 23, 2024 Securities Purchase Agreement, the Company offered and sold in the December 23, 2024 Registered Direct Offering 240,000 shares of Common Stock at a purchase price of $2.00 per share. In the December 23, 2024 Private Placement, the Company also issued to such institutional and accredited investors unregistered warrants to purchase up to 240,000 shares of Common Stock (the "**Series F Warrants**"). Under the terms of the December 23, 2024 Securities Purchase Agreement, for each share of Common Stock issued in the December 23, 2024 Registered Direct Offering, an accompanying Series F Warrant was issued to the purchaser thereof. Each Series F Warrant is exercisable for one share of Common Stock at an exercise price of $2.00 per share and will expire on December 24, 2029. The Series F Warrants were offered and sold at a purchase price of $0.125 per Series F Warrant, which purchase price is included in the offering price per share of Common Stock issued in the December 23, 2024 Registered Direct Offering.

In connection with the December 2024 Offerings, the Company agreed to issue to the Placement Agent, or its designees, warrants to purchase up to an aggregate of 50,789 shares of Common Stock (the "**Placement Agent Warrants**"), which represent 7.5% of the aggregate number of shares of Common Stock sold in the December 19, 2024 Registered Direct Offering and the December 23, 2024 Registered Direct Offering. The Placement Agent Warrants have substantially the same terms as the Series E Warrants and the Series F Warrants, except that (i) 32,789 of the Placement Agent Warrants have an exercise price equal to $3.2938, or 125% of the offering price per share of Common Stock sold in the December 19, 2024 Registered Direct Offering, and are exercisable until December 19, 2029, and (ii) 18,000 of the Placement Agent Warrants have an exercise price equal to $2.50, or 125% of the offering price per share of Common Stock sold in the December 23, 2024 Registered Direct Offering, and are exercisable until December 23, 2029.

January 13, 2025 Concurrent Registered Direct Offering and Private Placement

On January 13, 2025, the Company entered into a securities purchase agreement (the "**January 13, 2025 Securities Purchase Agreement**") with certain institutional and accredited investors in connection with a registered direct public offering (the "**January 13, 2025 Registered Direct Offering**") and concurrent private placement (the "**January 13, 2025 Private Placement**" and, together with the January 13, 2025 Registered Direct Offering, the "**January 13, 2025 Offerings**"). The January 13, 2025 Offerings closed on January 14, 2025. In addition, the Company issued warrants to the Placement Agent to purchase a total of 79,775 shares of Common Stock at an exercise price of $3.75 per share. The net proceeds to the Company from the January 13, 2025 Registered Direct Offerings and the January 13, 2025 Private Placement were approximately $2.9 million, after deducting fees and estimated offering expenses.

Pursuant to the January 13, 2025 Securities Purchase Agreement, the Company offered and sold in the January 13, 2025 Registered Direct Offering 1,063,670 shares of Common Stock at a purchase price of $3.00 per share. In the January 13, 2025 Private Placement, the Company also issued to certain institutional and accredited investors unregistered warrants to purchase up to 2,127,340 shares of Common Stock (the "**Series G Warrants**"). Under the terms of the January 13, 2025 Securities Purchase Agreement, for each share of Common Stock issued in the January 13, 2025 Registered Direct Offering, two accompanying Series G Warrants were issued to the purchaser thereof. Each Series G Warrant is exercisable for one share of Common Stock at an exercise price of $3.00 per share and will expire on January 14, 2027.

January 14, 2025 Concurrent Registered Direct Offering and Private Placement

On January 14, 2025, the Company entered into a securities purchase agreement (the "**January 14, 2025 Securities Purchase Agreement**") with certain institutional and accredited investors in connection with a registered direct public offering (the "**January 14, 2025 Registered Direct Offering**") and concurrent private placement (the "**January 14, 2025 Private Placement**" and together with the January 14, 2025 Registered Direct Offering, the "**January 14, 2025 Offerings**"). The January 14, 2025 Offerings closed on January 15, 2025. In addition, the Company issued warrants to the Placement Agent to purchase a total of 62,500 shares of Common Stock at an exercise price of $3.75 per share. The net proceeds to the Company from the January 14, 2025 Registered Direct Offering and the January 14, 2025 Private Placement were approximately $2.2 million, after deducting fees and estimated offering expenses.

Pursuant to the January 14, 2025 Securities Purchase Agreement, the Company offered and sold in the January 14, 2025 Registered Direct Offering 833,335 shares of Common Stock at a purchase price of $3.00 per share. In the January 14, 2025 Private Placement, the Company also issued to such institutional and accredited investors unregistered warrants to purchase up to 1,666,670 shares of Common Stock (the "**Series H Warrants**"). Under the terms of the January 14, 2025 Securities Purchase Agreement, for each share of Common Stock issued in the January 14, 2025 Registered Direct Offering, two accompanying Series H Warrants were issued to the purchaser thereof. Each Series H Warrant is exercisable for one share of Common Stock at an exercise price of $3.00 per share and will expire on January 15, 2027.

January 16, 2025 Concurrent Registered Direct Offering and Private Placement

On January 16, 2025, the Company entered into a securities purchase agreement (the "**January 16, 2025 Securities Purchase Agreement**") with certain institutional and accredited investors in connection with a registered direct public offering (the "**January 16, 2025 Registered Direct Offering**") and concurrent private placement (the "**January 16, 2025 Private Placement**" and, together with the January 16, 2025 Registered Direct Offering, the "**January 16, 2025 Offerings**" and the January 16, 2025 Offerings, together with the January 13, 2025 Offerings and the January 14, 2025 Offerings, the "**January 2025 Offerings"**). The January 16, 2025 Offerings closed on January 17, 2025. In addition, the Company issued warrants to the Placement Agent to purchase a total of 45,750 shares of Common Stock at an exercise price of $3.75 per share The net proceeds to the Company from the January 16, 2025 Registered Direct Offering and the January 16, 2025 Private Placement are approximately $1.6 million, after deducting fees and estimated offering expenses.

Pursuant to the January 16, 2025 Securities Purchase Agreement, the Company offered and sold in the January 16, 2025 Registered Direct Offering 610,000 shares of Common Stock at a purchase price of $3.00 per share. In the January 16, 2025 Private Placement, the Company also issued to such institutional and accredited investors unregistered warrants to purchase up to 1,220,000 shares of Common Stock (the "**Series I Warrants**"). Under the terms of the January 16, 2025 Securities Purchase Agreement, for each share of Common Stock issued in the January 16, 2025 Registered Direct Offering, two accompanying Series I Warrants were issued to the purchaser thereof. Each Series I Warrant is exercisable for one share of Common Stock at an exercise price of $3.00 per share and will expire on January 19, 2027.

Warrants

The Company first assesses warrants that are issued by the Company under the FASB ASC Topic 480, "*Distinguishing Liabilities from Equity*" ("**ASC 480**") to determine whether the warrants are within the scope of ASC 480. If there are no instances outside of the Company's control that could require cash settlement, the Company then applies and follows the applicable accounting guidance in the FASB ASC Topic 815, "*Derivatives and Hedging*" ("**ASC 815**"). Financial instruments are accounted for as either derivative liabilities or equity instruments depending on the specific terms of the agreement. Based on the assessment of the warrants issued by the Company under the guidance in ASC 480 and ASC 815, the warrants issued by the Company have been classified within stockholder's equity.

During the three months ended March 31, 2025, there were 537,432 warrants exercised.

The following table summarizes the Company's outstanding warrants, all of which are classified as equity instruments, at March 31, 2025:

	Number of Shares	Weighted-Average Exercise Price Per Share
Outstanding at December 31, 2024	1,925,867	$ 12.66
Issued	5,242,342	3.06
Exercised	(537,432)	5.45
Expired	(9,659)	457.92
Outstanding at March 31, 2025	6,621,118	$ 4.99

5. Stock-based Compensation

Restricted Stock Units

Restricted stock units ("**RSUs**") are issued under the Company's 2020 Long-Term Incentive Plan (the "**2020 Plan**"). RSUs are generally subject to the satisfaction of certain service requirements. RSUs granted by the Company to employees generally cliff vest 1 year after the grant date. Upon vesting, each outstanding RSU will be settled for one share of the Company's common stock. Employee RSU recipients may elect to net share settle upon vesting, in which case the Company pays the employee's withholding taxes due upon vesting and withholds a number of shares of equal value. The Company does not expect to repurchase shares to satisfy RSU vests. The fair value of the RSUs awarded is based upon the Company's closing stock price at the grant date and is expensed over the requisite service period.

The following table summarizes the activity of the Company's RSUs for the three months ended March 31, 2025:

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Unvested units at December 31, 2024	71,000	$ 2.77
Granted	–	–
Vested	–	–
Forfeited	–	–
Unvested units at March 31, 2025	71,000	$ 2.77

There were no RSUs granted during the three months ended March 31, 2025 or March 31, 2024.

Stock-based compensation expense related to RSUs was $43,000 and $26,000 for the three months ended March 31, 2025 and 2024, respectively.

The aggregate fair value of awards that vested during the three months ended March 31, 2024 was $17,000, which represents the market value of the Company's common stock on the date that the RSUs vested. No RSUs vested during the three months ended March 31, 2025.

Stock Options

Stock options are available for issuance under the 2020 Plan or as inducement grants issued outside of the 2020 Plan to new employees. Stock options are generally subject to graded vesting and the satisfaction of service requirements. Stock options granted by the Company to employees generally vest annually over 4 years after the grant date and generally vest over 1 year after the grant date for members of the Board of Directors and expire within ten years of grant. Upon the exercise of a stock option, the Company issues new shares and delivers them to the recipient. The Company does not expect to repurchase shares to satisfy stock option exercises.

The Company uses the Black-Scholes option-pricing model to determine the fair value of all its option grants. The risk-free interest rate used for each grant was based upon the yield on zero-coupon U.S. Treasury securities with a term similar to the expected life of the related option. The Company's expected stock price volatility assumption is based upon the Company's own implied volatility. As the Company has limited stock option exercise information, the expected life assumption used for option grants is based upon the simplified method provided for under the FASB ASC Topic 718, "*Compensation — Stock Compensation*". The dividend yield assumption is based upon the fact that the Company has never paid cash dividends and presently has no intention of paying cash dividends.

The Company did not grant any stock options during the three months ended March 31, 2025 or 2024.

The following table summarizes the activity of the Company's stock options for the three months ended March 31, 2025:

	Number of Shares	Weighted-Average Exercise Price Per Share	Aggregate Intrinsic Value
Balance at December 31, 2024	1,126	$ 1,206.29	
Granted	–	–	
Exercised	–	–	
Forfeited	–	–	
Expired	–	–	
Balance at March 31, 2025	1,126	$ 1,206.29	$ –
Exercisable at March 31, 2025	1,126	$ 1,206.29	$ –

Stock-based compensation expense related to stock options for the three months ended March 31, 2024 was $6,000. There was no stock-based compensation expense related to stock options for the three months ended March 31, 2025.

Compensation Expense Related to Equity Awards

The following table sets forth total stock-based compensation expense for the three months ended March 31, 2025 and 2024, in thousands:

	March 31,	
	2025	2024
Research and development	$ 15	$ (11)
General and administrative	28	43
Total stock-based compensation	$ 43	$ 32

As of March 31, 2025, the total unrecognized compensation cost related to non-vested RSUs was approximately $99,000. This cost is expected to be recognized over a weighted-average period of 1 year.

The following table summarizes the future stock-based compensation expense expected to be recognized:

2025 (remaining)	$ 99
Total remaining stock based-compensation	99

6. Net Loss per Common Share

Basic net loss per share is computed by dividing net loss by the weighted average number of common shares outstanding. Diluted net loss per share is computed by dividing the Company's net loss by the weighted average number of common shares outstanding and the impact of the dilutive effect of potential common stock equivalents, except when the inclusion of such potential common stock equivalents would be anti-dilutive. Dilutive potential common stock equivalents primarily consist of stock options, RSUs and warrants. Therefore, basic and diluted net loss per share applicable to common stockholders were the same for all periods presented because the impact of these items is generally anti-dilutive during periods of net loss.

The following table sets forth the potential common shares excluded from the calculation of net loss per common share because their inclusion would be anti-dilutive:

	March 31,	
	2025	**2024**
Stock options	1,126	10,061
Unvested RSUs	71,000	18,582
Warrants	6,621,118	5,504,918
Total	6,693,244	5,533,561

7. Segment Information

The Company is a clinical stage biopharmaceutical company that has yet to generate operating revenues. Management has determined that the Company operates with a single operating segment and a single reporting segment – the Clinical segment. The Chief Operating Decision Maker (CODM) is the Chief Executive Officer (CEO). The CEO assesses performance and allocates resources to achieve the Company's goals based on net income/(loss) as reported in the Consolidated Statements of Operations. The measure of segment assets is Total Assets as presented on the Consolidated Balance Sheets. All of the Company's operations occur within the United States.

The following table presents selected financial information with respect to the Company's single operating segment (in thousands):

	March 31,	
	2025	**2024**
Research and development expense	$ (886)	$ (1,148)
General and administrative expense	(986)	(1,061)
Impairment loss on property and equipment	–	–
Other income (expense)	(22)	2
Interest income	125	54
Interest expense	–	(1)
Net loss	$ (1,769)	$ (2,154)
Total assets	$ 13,440	$ 5,738

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

In this report, "we," "our," "ours," "us," "Phio" and the "Company" refers to Phio Pharmaceuticals Corp. and our subsidiary, MirImmune, LLC and the ongoing business operations of Phio Pharmaceuticals Corp. and MirImmune, LLC, whether conducted through Phio Pharmaceuticals Corp. or MirImmune, LLC.

*This management's discussion and analysis of financial condition as of March 31, 2025 and results of operations for the three months ended March 31, 2025 and 2024 should be read in conjunction with the audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2024, which was filed with the Securities and Exchange Commission (the "**SEC**") on March 31, 2025 (the "2024 Form 10-K").*

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words such as "intends," "believes," "anticipates," "indicates," "plans," "expects," "suggests," "may," "would," "should," "potential," "designed to," "will," "ongoing," "estimate," "forecast," "target," "predict," "could" and similar references, although not all forward-looking statements contain these words. Forward-looking statements are neither historical facts nor assurances of future performance. These statements are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements as a result of a number of important factors, including, but not limited to:

- *we are dependent on the success of our INTASYL™ technology, and our product candidates based on this technology, which is unproven and may never lead to approved and marketable products;*
- *our product candidates are in an early stage of development and we may fail, experience significant delays, never advance in clinical development or not be successful in our efforts to identify or discover additional product candidates, which may materially and adversely impact our business;*
- *disruptions at the FDA, including due to a reduction in the FDA's workforce and/or inadequate funding for the FDA, could prevent the FDA from performing normal functions on which our business relies, which could negatively impact our business;*
- *if we experience delays or difficulties in identifying and enrolling subjects in clinical trials, it may lead to delays in generating clinical data and the receipt of necessary regulatory approvals;*
- *topline data may not accurately reflect or may materially differ from the complete results of a clinical trial;*
- *we rely upon third parties for the manufacture of the clinical supply for our product candidates;*
- *our business and operations would suffer in the event of computer system failures, cyberattacks or a deficiency in our cybersecurity;*
- *we are dependent on the patents we own and the technologies we license, and if we fail to maintain our patents or lose the right to license such technologies, our ability to develop new products would be harmed;*
- *we will require substantial additional funds to complete our research and development activities;*
- *future financing may be obtained through, and future development efforts may be paid for by, the issuance of debt or equity, which may have an adverse effect on our stockholders or may otherwise adversely affect our business;*
- *changes in U.S. and international trade policies may adversely impact our business and operating results;*
- *we may not be able to remain compliant with the continued listing requirements of The Nasdaq Capital Market; and*
- *the price of our Common Stock has been and may continue to be volatile.*

Therefore, you should not rely on any of these forward-looking statements. Forward-looking statements contained in this Quarterly Report on Form 10-Q speak as of the date hereof and the Company does not undertake to update any of these forward-looking statements to reflect a change in its views or events or circumstances that occur after the date of this report except as required by law.

Overview

Phio Pharmaceuticals Corp. ("**Phio**," "**we**," "**our**" or the "**Company**") is a clinical stage biopharmaceutical company whose proprietary INTASYL® self-delivering small interfering RNAi(siRNA) technology is designed to make immune cells more effective in killing tumor cells. We are developing therapeutics that are designed to leverage INTASYL to precisely target specific proteins that reduce the body's ability to fight cancer, without the need for specialized formulations or drug delivery systems. We are committed to discovering and developing innovative cancer treatments for patients by creating new pathways toward a cancer-free future.

In 2023, the Company implemented a cost rationalization program driven by its transition from discovery research to product development. This resulted in a decision not to renew the lease for office and laboratory space in Marlborough, Massachusetts, which expired on March 31, 2024. Beginning in April 2024, we have continued operations as a remote business with a laboratory facility in Worcester, Massachusetts. Beginning in January 2024, we rationalized discovery research personnel resulting in an overall headcount reduction by greater than 50%. Expense reductions have been redirected to funding the Phase 1b clinical trial with PH-762.

PH-762

PH-762 is an INTASYL compound designed to reduce the expression of cell death protein 1 ("**PD-1**"). PD-1 is a protein that inhibits T cells' ability to kill cancer cells and is a clinically validated target in immunotherapy. Decreasing the expression of PD-1 can thereby increase the capacity of T cells, which protect the body from cancer cells and infections, to kill cancer cells.

Our preclinical studies have demonstrated that direct-to-tumor application of PH-762 resulted in potent anti-tumoral effects and have shown that direct-to-tumor treatment with PH-762 inhibits tumor growth in a dose dependent fashion in PD-1 responsive and refractory models. Importantly, direct-to-tumor administration of PH-762 resulted in activity against distant untreated tumors, indicative of a systemic anti-tumor response. We believe these data further support the potential for PH-762 to provide a strong local immune response without the dose immune-related adverse effects seen with systemic antibody therapy.

PH-762 is currently being evaluated in a U.S. multi-center Phase 1b dose-escalating clinical trial through the intratumoral injection of PH-762 for the treatment of patients with cutaneous squamous cell carcinoma, melanoma and Merkel cell carcinoma. The trial (NCT 06014086) is designed to evaluate the safety and tolerability of neoadjuvant use of intratumorally injected PH-762, assess the tumor response, and determine the dose or dose range for continued study of PH-762 and is expected to enroll up to 30 patients. In November 2023, we announced the dosing of the first patient under a previously cleared Investigational New Drug ("**IND**") application by the U.S. Food and Drug Administration. A Safety Monitoring Committee (SMC) reviewed data from the first, second and third dose cohorts treated with PH-762 and, in each case, recommended escalation to the next dose concentration. To date, a total of 10 patients with cutaneous carcinomas have been treated in Cohorts 1, 2 and 3. These cohorts included 9 patients with cutaneous squamous cell carcinoma (cSCC) and 1 patient with metastatic melanoma. At Day 36 (planned tumor excision), of the 9 patients with cSCC, 4 patients had a pathologic complete response (100% tumor clearance). One patient had a near complete response (>90% clearance) and 1 patient had a partial response (>50% clearance). The other 3 cSCC patients and one metastatic melanoma patient had a pathologic non-response (< 50% clearance). Patients with pathologic complete response (100% tumor clearance) may have visual signs of residual scar or subdermal inflammation prior to resection. No patients, however, exhibited clinical progression of disease. To date, there were no dose-limiting toxicities or clinically relevant treatment-emergent adverse effects in the patients receiving intratumoral PH-762 in this trial. Moreover, PH-762 has been well tolerated in all enrolled patients in each escalating dose cohort. The fourth cohort is currently enrolling patients, and we expect to complete enrollment in the trial in the third quarter of 2025.Given our intention to focus our efforts and resources on our U.S. clinical trial with PH-762, we have completed the winding down process for our first-in-human clinical trial for PH-762 in France, which was limited to the treatment of patients with metastatic melanoma. Safety data from the initial cohort of three patients in the French clinical trial were evaluated by a data monitoring committee in the first quarter of 2023. The safety data review disclosed no dose-limiting toxicity, and no drug-related severe or serious adverse events.

Due to INTASYL's ease of administration, we have shown that our compounds can easily be incorporated into current Adoptive Cell Therapy (ACT) manufacturing processes. In ACT, T cells are usually taken from a patient's own blood or tumor tissue, grown in large numbers in a laboratory, and then given back to the patient to help the immune system fight cancer. By treating T cells with our INTASYL compounds while they are being grown in the laboratory, we believe our INTASYL compounds can improve these immune cells to make them more effective in killing cancer. Preclinical data generated in collaboration with AgonOx, Inc. ("**AgonOx**"), a private company developing a pipeline of novel immunotherapy drugs targeting key regulators of the immune response to cancer, demonstrated that treating AgonOx's "double positive" tumor infiltrating lymphocytes ("**DP TIL**") with PH-762 increased their tumor killing activity by two-fold.

In February 2021, we entered into a clinical co-development collaboration agreement (the "**Clinical Co-Development Agreement**") with AgonOx to develop a T cell-based therapy using PH-762 and AgonOx's DP TIL. Under the Clinical Co-Development Agreement, we had agreed to reimburse AgonOx up to $4 million in expenses incurred to conduct a Phase 1 clinical trial of PH-762 treated DP TIL in patients with advanced melanoma and other advanced solid tumors. We were also eligible to receive certain future development milestones and low single-digit sales-based royalty payments from AgonOx's licensing of its DP TIL technology.

In May 2024, we terminated the Clinical Co-Development Agreement with AgonOx, effective immediately. Effective as of the date of termination, the Clinical Co-Development Agreement and our and AgonOx's continuing obligations thereunder were terminated in their entirety. We are no longer required to provide financial support for the development costs incurred in the Clinical Co-Development Agreement and we are no longer entitled to future development milestones or royalty payments from AgonOx's licensing of its DP TIL technology. We paid to AgonOx all payment obligations that accrued prior to the termination of the Clinical Co-Development Agreement. Pursuant to the terms of the Clinical Co-Development Agreement, each of the Company and AgonOx were responsible for its own costs and expenses incurred in connection with the wind-down of the Phase 1 clinical trial. We made the remaining payment of $34,320, which primarily related to accrued obligations for patient fees and other miscellaneous costs as of the date of termination to AgonOx on March 21, 2025. This settled all future obligations to AgonOx.

Prior to the termination of the Clinical Co-Development Agreement with AgonOx, PH-762 treated DP TIL were being evaluated in a Phase 1 clinical trial in the U.S. with up to 18 patients with advanced melanoma and other advanced solid tumors by AgonOx. The primary trial objectives were to evaluate the safety and to study the potential for enhanced therapeutic benefit from the administration of PH-762 treated DP TIL. AgonOx had enrolled three patients. The first two patients were treated with DP TIL only and a third patient was treated with a combination of DP TIL and PH-762. Clinical results for the single patient who received a combination of DP TIL and PH-762 showed tumor size reductions of 65%, 100% and 81%, respectively, in three melanoma lesions.

PH-894

PH-894 is an INTASYL compound that is designed to silence BRD4, a protein that controls gene expression in both T cells and tumor cells, thereby affecting the immune system as well as the tumor. Intracellular and/or commonly considered "undruggable" targets, such as BRD4, represent a challenge for small molecule and antibody therapies. Therefore, what sets this compound apart is its dual mechanism: PH-894 suppression of BRD4 in T cells results in T cell activation, and suppression of BRD4 in tumor cells results in tumors becoming more sensitive to being killed by T cells.

Preclinical studies conducted have demonstrated that PH-894 resulted in a strong, concentration dependent and durable silencing of BRD4 in T cells and in various cancer cells. Similar to PH-762, preclinical studies have also shown that direct-to-tumor application of PH-894 resulted in potent and statistically significant anti-tumoral effects against distant untreated tumors, indicative of a systemic anti-tumor response. These preclinical data indicate that PH-894 can reprogram T cells and other cells in the tumor microenvironment to provide enhanced immunotherapeutic activity. We have completed the IND-enabling studies and are in the process of finalizing the study reports required for an IND submission with PH-894. As a result of the reprioritization to advance our clinical trial with PH-762 in the U.S., we have elected to defer the IND submission for PH-894.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates and base our estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions and could have a material impact on our reported results.

There have been no material changes to our critical accounting policies and estimates as compared to those disclosed in our 2024 Form 10-K. For a discussion of our critical accounting policies and estimates, refer to "*Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Policies and Estimates*" in Part II, Item 7 of our Form 10-K for the fiscal year ended December 31, 2024.

Results of Operations

The following data summarizes the results of our operations for the periods indicated, in thousands:

	Three Months Ended March 31,		Dollar
	2025	2024	Change
Operating expenses	$ 1,872	$ 2,209	$ (337)
Operating loss	$ (1,872)	$ (2,209)	$ 337
Net loss	$ (1,769)	$ (2,154)	$ 385

Comparison of the Three Months Ended March 31, 2025 and 2024

Operating Expenses

The following table summarizes our total operating expenses, for the periods indicated, in thousands:

	Three Months Ended March 31,		Dollar
	2025	2024	Change
Research and development	$ 886	$ 1,148	$ (262)
General and administrative	986	1,061	(75)
Total operating expenses	$ 1,872	$ 2,209	$ (337)

Research and Development Expenses

Research and development expenses relate to compensation and benefits for research and development personnel, facility-related expenses, supplies, external services, costs to acquire technology licenses, research activities under our research collaboration agreement, expenses associated with preclinical and clinical development activities and other operating costs. Our research and development programs are focused on the development of immuno-oncology therapeutics based on our INTASYL technology. Since we commenced operations, research and development expenses have been a significant portion of our total operating expenses and are expected to constitute the majority of our spending for the foreseeable future.

Research and development expenses for the three months ended March 31, 2025 decreased 23% as compared with the three months ended March 31, 2024. The decrease in research and development expenses was primarily driven by a $106,000 decrease in salary-related costs and a $94,000 decrease in consulting expense.

General and Administrative Expenses

General and administrative expenses relate to compensation and benefits for general and administrative personnel, facility-related expenses, professional fees for legal and patent-related activities, audit, tax and consulting services, as well as other general corporate expenses.

General and administrative expenses for the three months ended March 31, 2025 decreased 7% as compared with the three months ended March 31, 2024. The Company considers this to be an immaterial fluctuation.

Liquidity and Capital Resources

Historically, our primary source of funding has been through the sale of our securities. In the future, we will be dependent on obtaining funding from third parties, such as proceeds from the issuance of debt, sale of equity or strategic opportunities, in order to maintain our operations. We have reported recurring losses from operations since inception and expect that we will continue to have negative cash flows from our operations for the foreseeable future. At March 31, 2025, we had cash and cash equivalents of $13,278,000 as compared with $5,382,000 at December 31, 2024.

We have limited cash resources, have reported recurring losses from operations since inception, have negative operating cash flows and have not yet received product revenues. These factors raise substantial doubt regarding our ability to continue as a going concern, and our current cash resources may not provide sufficient capital to fund operations for at least the next 12 months from the date of the release of the condensed consolidated financial statements included elsewhere in this Quarterly Report. Our continuation as a going concern depends upon our ability to raise additional capital through equity offerings, debt offerings and/or strategic opportunities to fund our operations. There can be no assurance that we will be successful in accomplishing any of these plans in order to continue as a going concern. The condensed consolidated financial statements included elsewhere in this Quarterly Report do not include any adjustments to the recoverability and classification of recorded asset amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern.

The following table summarizes our cash flows for the periods indicated, in thousands:

	Three Months Ended March 31,	
	2025	**2024**
Net cash used in operating activities	$ (1,275)	$ (2,011)
Net cash used in investing activities	(2)	–
Net cash provided by financing activities	9,173	(4)
Net increase in cash and cash equivalents	$ 7,896	$ (2,015)

Net Cash Used in Operating Activities

Net cash used in operating activities for the three months ended March 31, 2025 decreased 37% as compared to the three months ended March 31, 2024. This was primarily due to a decrease in net loss of $385,000, and a decrease of $350,000 of cash outflows driven by a reduction in prepaid expenses and a comparative increase in operating liabilities during the three months ended March 31, 2025.

Net Cash Used in Investing Activities

Net cash used in investing activities for the three months ended March 31, 2025 was approximately $2,000 as compared to the three months ended March 31, 2024 where net cash used in investing activities was $0. The increase in net cash used in investing activities was primarily due to computer equipment purchases during the three months ended March 31, 2025.

Net Cash Flow Provided by Financing Activities

Net cash provided by financing activities for the three months ended March 31, 2025 was approximately $9,173,000 as compared to the three months ended March 31, 2024 where net cash used in financing activities was $4,000. The increase in net cash provided by financing activities was primarily due to the issuance of common stock and warrants, and the exercise of warrants, both as described in Note 2 of the condensed consolidated financial statements.

Contractual Obligations

Details of our obligations under the Clinical Co-Development Agreement with our former collaboration partner AgonOx can be found in Note 2 of the condensed consolidated financial statements. Outside of the above, there have been no material changes to the contractual obligations as disclosed in our 2024 Form 10-K. For a discussion of our critical accounting policies and estimates, refer to "*Management's Discussion and Analysis of Financial Condition and Results of Operations - Contractual Obligations*" in Part II, Item 7 of our Form 10-K for the fiscal year ended December 31, 2024.

Future Funding Requirements

At March 31, 2025, we had cash and cash equivalents of $13,278,000, which includes aggregate net proceeds of approximately $6,700,000, after deducting fees and estimated offering expenses, from our January 2025 Financings. We expect that our cash and cash equivalents will enable us to fund our current operating plan into the second quarter of 2026. Due to the difficulty and uncertainty associated with the design and implementation of preclinical studies and clinical trials, we will continue to assess our cash and cash equivalents and future funding requirements. However, there is no assurance that additional funding will be achieved and that we will succeed in our future operations. We expect to continue to incur substantial additional operating losses for at least the next several years as we continue to develop our product candidates and seek marketing approval and, subject to obtaining such approval, the eventual commercialization of our product candidates. If we obtain marketing approval for any of our product candidates, we will incur significant sales, marketing and manufacturing expenses. We also expect to continue to incur significant costs to comply with corporate governance, internal controls and similar requirements associated with operating as a public reporting company.

Actual cash requirements could differ from management's projections due to many factors including additional investments in research and development programs such as PH-894, clinical trial expenses for PH-762, competing technological and market developments, general and administrative expenses, and the costs of any strategic acquisitions and/or development of complementary business opportunities. The amount of additional capital we will require will be influenced by many factors, including, but not limited to:

- the scope, progress, results, and costs of clinical trials of PH-762;
- our expectations regarding the timing and clinical development of PH-762;
- whether and to what extent we internally fund, whether and when we initiate, and how we conduct additional pipeline product development programs, including PH-894;
- whether and when we are able to enter into strategic arrangements for our product candidates and the nature of those arrangements;
- the costs involved in preparing, filing, prosecuting, maintaining, defending, and enforcing any patent claims;
- changes in our operating plan, resulting in increases or decreases in our need for capital;
- U.S. and international trade policies; and
- our views on the availability, timing, and desirability of raising capital.

We expect to seek additional funding to sustain our future operations and while we have successfully raised capital in the past, the ability to raise capital in future periods is not assured. We do not know if additional capital will be available when needed or on terms favorable to us or our stockholders. Collaboration, licensing or other agreements may not be available on favorable terms, or at all. If we seek to sell our equity securities, we do not know whether and to what extent we will be able to do so, or on what terms. If available, additional equity financing may be dilutive to stockholders, debt financing may involve restrictive covenants or other unfavorable terms and dilute our existing stockholders' equity, and funding through collaboration, licensing or other commercial agreements may be on unfavorable terms, including requiring us to relinquish rights to certain of our technologies or products. If adequate financing is not available if and when needed, we may delay, reduce the scope of, or eliminate research or development programs, if any, postpone or cancel the pursuit of product candidates, or otherwise significantly curtail our operations to reduce our cash requirements and extend our capital.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company, we are not required to provide this information.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Principal Executive Officer and our Principal Financial Officer, evaluated the effectiveness of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")) as of the end of the period covered by this report to ensure that information that we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives. We believe that a control system, no matter how well designed and operated, cannot provide absolute assurance that the objectives of the control system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected. Based on the evaluation of our disclosure controls and procedures as of the end of the period covered by this report, management, with the participation of our Principal Executive Officer and Principal Financial Officer, concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of such date.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the quarter ending March 31, 2025 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may become a party to various legal proceedings and complaints arising in the ordinary course of business. We are not currently a party to any actual or threatened material legal proceedings of which we are aware.

ITEM 1A. RISK FACTORS

Other than set forth below, there have been no material changes in our risk factors set forth in "*Risk Factors in Part I*, "*Item 1A*". in our 2024 Form 10-K. The risk factor described therein and set forth below could materially adversely affect our business, financial condition, or results of operations. This Quarterly Report on Form 10-Q also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including these risks. Additional risks not currently known or currently material to us may also harm our business.

We may not be able to maintain compliance with the continued listing requirements of The Nasdaq Capital Market.

To maintain continued listing on The Nasdaq Capital Market, we must satisfy minimum financial and other requirements. For example, Nasdaq Listing Rule 5550(b)(1) requires companies listed on the Nasdaq Capital Market to maintain stockholders' equity of at least $2.5 million for continued listing. As of March 31, 2025, our stockholders' equity was $12.2 million and there can be no assurance that we will be able to maintain or increase our stockholders' equity in the future. If our stockholders' equity falls below $2.5 million, as a result of operating losses or for other reasons, or if we are unable to demonstrate to Nasdaq's satisfaction that we subsequently regained compliance with this requirement, Nasdaq will notify us of such non-compliance. If we receive such notice from Nasdaq, in accordance with the Nasdaq Listing Rules, we will have 45 calendar days from the date of the notification to submit a plan to regain compliance with Nasdaq Listing Rule 5550(b)(1). If our compliance plan is accepted, we may be granted up to 180 calendar days from the date of the initial notification to evidence compliance. If our compliance plan is not accepted or we are otherwise unable to evidence compliance within Nasdaq's allotted timeframe, Nasdaq may take steps to delist our Common Stock.

In addition, Nasdaq Listing Rule 5550(a)(2) requires a minimum bid price of at least $1.00 per share, and Nasdaq Listing Rule 5810(c)(3)(A) provides that a failure to meet the minimum bid price requirement exists if the deficiency continues for a period of 30 consecutive business days. Although the Company is currently in compliance with this requirement, there can be no assurance that we will be able to maintain compliance. We have in the past effected reverse stock splits of our Common Stock in order to regain or maintain compliance with this requirement (most recently on July 5, 2024). Nasdaq Listing Rule 5810(c)(3)(A)(iv) states that any listed company that fails to meet this requirement and has effected a reverse stock split over the prior one-year period, or has effected one or more reverse stock splits over the prior two-year period with a cumulative ratio of 250 shares or more to one, may not be eligible for an automatic 180-day grace compliance period and the Nasdaq Listing Qualifications Department is obligated to immediately issue a delisting determination. Therefore, if we were to fall out of compliance with the minimum bid price requirement prior to July 5, 2025, we would not be able to effect a reverse stock split and would immediately be issued a delisting determination.

Such a delisting would have an adverse effect on the market liquidity of our securities, decrease the market price of our securities, result in the potential loss of confidence by investors, suppliers, customers and employees and fewer business development opportunities, and adversely affect our ability to obtain financing for the continuation of our operations. We actively monitor our stockholders' equity and minimum bid price and will consider any and all options available to us to maintain compliance with Nasdaq Listing Rules 5550(b)(1) and (a)(2).

Changes in U.S. and international trade policies may adversely impact our business and operating results.

From time to time, proposals are made to significantly change existing trade agreements and relationships between the U.S. and other countries. In recent years, the U.S. government has implemented substantial changes to U.S. trade policies, including import restrictions, increased import tariffs and changes in U.S. participation in multilateral trade agreements. Because some of our vendors, manufactures and suppliers are located in other foreign countries, we are exposed to the possibility of product supply disruption and increased costs in the event of changes in the policies, laws, rules and regulations of the United States or foreign governments, as well as political unrest or unstable economic conditions in foreign countries. The U.S. government has indicated its intent to adopt a new approach to trade policy and in some cases to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements. For example, in February 2025, President Donald Trump signed executive orders imposing a 25% tariff on certain imports from Mexico and Canada, and in April 2025, up to 145% tariffs on certain imports from China. In April 2025, President Donald Trump also announced a plan for reciprocal tariffs and there have been statements from the current administration regarding additional tariffs on certain industries, including the pharmaceutical industry. Our supply may in the future be subject to these tariffs, which could increase our manufacturing costs and could make our products, if successfully developed and approved, less competitive than those of our competitors whose inputs are not subject to these tariffs. We may otherwise experience supply disruptions or delays, and our suppliers may not continue to provide us with clinical supply in our required quantities, to our required specifications and quality levels or at attractive prices. Such disruption could have adverse effects on the development of our product candidates and our business operations.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

No sales or issuances of unregistered securities occurred that have not previously been disclosed in a Current Report on Form 8-K.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

During the three months ended March 31, 2025, no director or officer of the Company adopted or terminated a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement, as each term is defined in Item 408(a) of Regulation S-K.

ITEM 6. EXHIBITS

EXHIBIT INDEX

Exhibit Number	Description	Incorporated by Reference Herein	
		Form	Date
3.1	Amended and Restated Certificate of Incorporation of Phio Pharmaceuticals Corp.	Current Report on Form 8-K (File No. 001-36304)	November 19, 2018
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Phio Pharmaceuticals Corp.	Current Report on Form 8-K (File No. 001-36304)	January 14, 2020
3.3	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Phio Pharmaceuticals Corp.	Current Report on Form 8-K (File No. 001-36304)	January 25, 2023
3.4	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Phio Pharmaceuticals Corp.	Current Report on Form 8-K (File No. 001-36304)	July 2, 2024
3.5	Certificate of Designation of Series D Preferred Stock, dated November 16, 2022.	Current Report on Form 8-K (File No. 001-36304)	November 16, 2022

3.6	Amended and Restated Bylaws of Phio Pharmaceuticals Corp.	Current Report on Form 8-K (File No. 001-36304)	May 2, 2022
4.1	Form of Warrant.	Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-221173)	September 28, 2018
4.2	Form of Placement Agent Warrant.	Current Report on Form 8-K (File No. 001-36304)	November 19, 2019
4.3	Form of Warrant.	Current Report on Form 8-K (File No. 001-36304)	February 6, 2020
4.4	Form of Warrant.	Current Report on Form 8-K (File No. 001-36304)	February 13, 2020
4.5	Form of Underwriter Warrant.	Current Report on Form 8-K (File No. 001-36304)	February 13, 2020
4.6	Form of Warrant.	Current Report on Form 8-K (File No. 001-36304)	April 2, 2020
4.7	Form of Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	January 25, 2021
4.8	Form of Placement Agent Warrant.	Current Report on Form 8-K (File No. 001-36304)	February 17, 2021
4.9	Form of Series A Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	April 20, 2023
4.10	Form of Series B Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	April 20, 2023
4.11	Form of Existing Warrant Amendment.	Current Report on Form 8-K (File No. 001-36304)	April 20, 2023
4.12	Form of Series A Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	June 2, 2023
4.13	Form of Series B Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	June 2, 2023
4.14	Form of Series A/B Warrant.	Current Report on Form 8-K (File No. 001-36304)	December 8, 2023
4.15	Form of Placement Agent Warrant.	Current Report on Form 8-K (File No. 001-36304)	December 8, 2023
4.16	Form of Series C/D Warrant.	Current Report on Form 8-K (File No. 001-36304)	July 12, 2024
4.17	Form of Placement Agent Warrant.	Current Report on Form 8-K (File No. 001-36304)	July 12, 2024

4.18	Form of Series E Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	December 20, 2024
4.19	Form of Placement Agent Warrant.	Current Report on Form 8-K (File No. 001-36304)	December 20, 2024
4.20	Form of Series F Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	December 26, 2024
4.21	Form of Placement Agent Warrant.	Current Report on Form 8-K (File No. 001-36304)	December 26, 2024
4.22	Form of Series G Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	January 14, 2025
4.23	Form of Placement Agent Warrant.	Current Report on Form 8-K (File No. 001-36304)	January 14, 2025
4.24	Form of Series H Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	January 15, 2025
4.25	Form of Placement Agent Warrant.	Current Report on Form 8-K (File No. 001-36304)	January 15, 2025
4.26	Form of Series I Common Stock Warrant.	Current Report on Form 8-K (File No. 001-36304)	January 17, 2025
4.27	Form of Placement Agent Warrant.	Current Report on Form 8-K (File No. 001-36304)	January 17, 2025
10.1	Form of Securities Purchase Agreement, dated January 13, 2025, by and between the Company and each of the Purchasers signatory thereto.	Current Report on Form 8-K (File No. 001-36304)	January 14, 2025
10.2	Form of Securities Purchase Agreement, dated January 14, 2025, by and between the Company and each of the Purchasers signatory thereto.	Current Report on Form 8-K (File No. 001-36304)	January 15, 2025
10.3	Form of Securities Purchase Agreement, dated January 16, 2025, by and between the Company and each of the Purchasers signatory thereto.	Current Report on Form 8-K (File No. 001-36304)	January 17, 2025
10.4#	First Amendment to the Employment Agreement of Robert J. Bitterman, dated March 25, 2025, by and between the Company and Robert Bitterman.	Annual Report on Form 10-K (File No. 001-36304)	March 31, 2025

31.1	Sarbanes-Oxley Act Section 302 Certification of Principal Executive Officer.*
31.2	Sarbanes-Oxley Act Section 302 Certification of Principal Financial Officer.*
32.1	Sarbanes-Oxley Act Section 906 Certification of Principal Executive Officer and Principal Financial Officer.**
101.INS	Inline XBRL Instance Document.*
101.SCH	Inline XBRL Taxonomy Extension Schema Document.*
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.*
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.*
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.*
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.*
104	The cover page for this report, formatted in Inline XBRL (included in Exhibit 101).*

* Filed herewith.

** Furnished herewith and not deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that Section or incorporated by reference into any filing under the Securities Act or the Exchange Act.

# Indicates a management contract or compensatory plan or arrangement.

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 thereunto duly authorized on May 15, 2025.

Phio Pharmaceuticals Corp.

By: /s/ Robert J. Bitterman
Robert J. Bitterman
President and Chief Executive Officer
(as Principal Executive Officer)

By: /s/ Robert M. Infarinato
Robert M. Infarinato
Chief Financial Officer
(as Principal Financial Officer)

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO
SECURITIES EXCHANGE ACT OF 1934 RULES 13a-14(a) AND 15d-14(a)
AS ADOPTED
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert J. Bitterman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Phio Pharmaceuticals Corp.;

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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a–15(f) and 15d–15(f)) 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, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. 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

    d. 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 controls over financial reporting.

Dated: May 15, 2025

/s/ Robert J. Bitterman
Robert J. Bitterman
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO
SECURITIES EXCHANGE ACT OF 1934 RULES 13a-14(a) AND 15d-14(a)
AS ADOPTED
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert M. Infarinato, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Phio Pharmaceuticals Corp.;

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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a–15(f) and 15d–15(f)) 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, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. 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

    d. 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 controls over financial reporting.

Dated: May 15, 2025

/s/ Robert M. Infarinato
Robert M. Infarinato
Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER
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 Phio Pharmaceuticals Corp. (the "Company") on Form 10-Q for the period ended March 31, 2025 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officers of the Company certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to their 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 Company's financial condition and results of operations.

Dated: May 15, 2025

/s/ Robert J. Bitterman
Robert J. Bitterman
President and Chief Executive Officer
(Principal Executive Officer)

Dated: May 15, 2025

/s/ Robert M. Infarinato
Robert M. Infarinato
Vice President and Chief Financial Officer
(Principal Financial Officer)