

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2019

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
(State of incorporation)

45-3215903
(I.R.S. Employer
Identification No.)

257 Simarano Drive, Suite 101, Marlborough, MA 01752
(Address of principal executive office) (Zip code)

Registrant's telephone number: (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 time 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 7(a)(2)(B) of the Securities 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 November 8, 2019, Phio Pharmaceuticals Corp. had 26,404,670 shares of common stock, \$0.0001 par value, outstanding.

PHIO PHARMACEUTICALS CORP.
FORM 10-Q — QUARTER ENDED SEPTEMBER 30, 2019

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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)

	September 30, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash	\$ 8,709	\$ 14,879
Restricted cash	50	50
Prepaid expenses and other current assets	533	221
Total current assets	9,292	15,150
Right of use asset	538	—
Property and equipment, net	231	172
Other assets	18	—
Total assets	<u>\$ 10,079</u>	<u>\$ 15,322</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 856	\$ 550
Accrued expenses and other current liabilities	1,076	1,194
Lease liability	104	—
Total current liabilities	2,036	1,744
Lease liability, net of current portion	438	—
Total liabilities	<u>2,474</u>	<u>1,744</u>
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.0001 par value, 10,000,000 shares authorized	—	—
Common stock, \$0.0001 par value, 100,000,000 shares authorized; 25,654,670 and 18,841,814 shares issued and outstanding at September 30, 2019 and December 31, 2018, respectively	3	2
Additional paid-in capital	99,761	99,487
Accumulated deficit	(92,159)	(85,911)
Total stockholders' equity	<u>7,605</u>	<u>13,578</u>
Total liabilities and stockholders' equity	<u>\$ 10,079</u>	<u>\$ 15,322</u>

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		Nine Months Ended	
	September 30,		September 30,	
	2019	2018	2019	2018
Revenues	\$ —	\$ 57	\$ 21	\$ 138
Operating expenses:				
Research and development	1,042	838	3,277	3,382
General and administrative	1,071	711	3,062	2,386
Total operating expenses	<u>2,113</u>	<u>1,549</u>	<u>6,339</u>	<u>5,768</u>
Operating loss	(2,113)	(1,492)	(6,318)	(5,630)
Total other income (expense), net	19	(1)	70	(3)
Net loss	<u>\$ (2,094)</u>	<u>\$ (1,493)</u>	<u>\$ (6,248)</u>	<u>\$ (5,633)</u>
Net loss per share:				
Basic and diluted	<u>\$ (0.08)</u>	<u>\$ (0.34)</u>	<u>\$ (0.27)</u>	<u>\$ (1.54)</u>
Weighted average shares: basic and diluted	<u>25,409,428</u>	<u>4,371,259</u>	<u>23,370,073</u>	<u>3,662,924</u>

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)

For the Three and Nine Months Ended September 30, 2019

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total
	Shares	Amount			
Balance at December 31, 2018	18,841,814	\$ 2	\$ 99,487	\$ (85,911)	\$ 13,578
Issuance of common stock upon the exercise of pre-funded warrants	4,304,286	—	43	—	43
Issuance of restricted stock	243,032	—	—	—	—
Stock-based compensation expense	—	—	160	—	160
Net loss	—	—	—	(2,119)	(2,119)
Balance at March 31, 2019	23,389,132	2	\$ 99,690	(88,030)	11,662
Issuance of common stock upon the exercise of pre-funded warrants	1,700,000	1	16	—	17
Issuance of common stock under the employee stock purchase plan	2,065	—	1	—	1
Stock-based compensation expense	—	—	62	—	62
Net loss	—	—	—	(2,035)	(2,035)
Balance at June 30, 2019	25,091,197	3	99,769	(90,065)	9,707
Stock-based compensation expense	—	—	47	—	47
Issuance of common stock under Lincoln Park Capital, LLC purchase agreement, net of offering costs of \$52	500,000	—	(52)	—	(52)
Issuance of common stock upon vesting of restricted stock units	63,473	—	(3)	—	(3)
Net loss	—	—	—	(2,094)	(2,094)
Balance at September 30, 2019	<u>25,654,670</u>	<u>\$ 3</u>	<u>\$ 99,761</u>	<u>\$ (92,159)</u>	<u>\$ 7,605</u>

For the Three and Nine Months Ended September 30, 2018

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total
	Shares	Amount			
Balance at December 31, 2017	2,429,993	\$ —	\$ 80,384	\$ (78,551)	\$ 1,833
Cash paid in lieu of fractional shares for 1:10 reverse stock split	(31)	—	—	—	—
Issuance of common stock under Lincoln Park Capital, LLC purchase agreement	270,000	—	932	—	932
Stock-based compensation expense	—	—	41	—	41
Net loss	—	—	—	(2,239)	(2,239)
Balance at March 31, 2018	2,699,962	—	81,357	(80,790)	567
Issuance of common stock and warrants in connection with registered direct offering and private placement, net of offering costs of \$690	1,510,604	—	4,210	—	4,210
Issuance of common stock under Lincoln Park Capital, LLC purchase agreement	150,000	—	359	—	359
Stock-based compensation expense	—	—	37	—	37
Net loss	—	—	—	(1,901)	(1,901)
Balance at June 30, 2018	4,360,566	—	85,963	(82,691)	3,272
Issuance of common stock under Lincoln Park Capital, LLC purchase agreement	15,000	—	21	—	21
Issuance of common stock under the employee stock purchase plan	756	—	1	—	1
Issuance of common stock, pre-funded warrants and warrants in connection with underwritten public offering, net of offering costs of \$90	—	—	(90)	—	(90)
Issuance of unvested, restricted stock	73,587	—	—	—	—
Stock-based compensation expense	—	—	39	—	39
Net loss	—	—	—	(1,493)	(1,493)
Balance at September 30, 2018	<u>4,449,909</u>	<u>\$ —</u>	<u>\$ 85,934</u>	<u>\$ (84,184)</u>	<u>\$ 1,750</u>

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)

	Nine Months Ended September 30,	
	2019	2018
Cash flows from operating activities:		
Net loss	\$ (6,248)	\$ (5,633)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	51	61
Non-cash lease expense	82	-
Non-cash stock-based compensation	269	117
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(330)	(113)
Accounts payable	306	(20)
Accrued expenses and other liabilities	(151)	(186)
Lease liability	(78)	-
Net cash used in operating activities	(6,099)	(5,774)
Cash flows from investing activities:		
Cash paid for purchase of property and equipment	(77)	-
Net cash used in investing activities	(77)	-
Cash flows from financing activities:		
Net proceeds from the issuance of common stock and/or warrants	-	5,432
Financing costs from the issuance of common stock under Lincoln Park Capital, LLC purchase agreement	(52)	-
Payment of taxes for net share settled restricted stock unit issuances	(3)	-
Proceeds from the exercise of pre-funded warrants	60	-
Proceeds from the issuance of common stock in connection with the employee stock purchase plan	1	1
Net cash provided by financing activities	6	5,433
Net decrease in cash and restricted cash	(6,170)	(341)
Cash and restricted cash at the beginning of period	14,929	3,631
Cash and restricted cash at the end of period	\$ 8,759	\$ 3,290
Supplemental disclosure of non-cash investing and financing activities:		
Right of use asset	\$ 620	\$ -
Purchase of equipment through short-term financing lease included in accrued expenses and other current liabilities	\$ 33	\$ -

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

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

1. Nature of Operations

Phio Pharmaceuticals Corp. (“Phio,” “we,” “our” or the “Company”) is a biotechnology company developing the next generation of immuno-oncology therapeutics based on its self-delivering RNAi (“INTASYL™”) therapeutic platform. The Company’s efforts are focused on silencing tumor-induced suppression of the immune system through its proprietary INTASYL™ platform with utility in immune cells and/or the tumor micro-environment. The Company’s goal is to develop powerful INTASYL™ therapeutic compounds that can weaponize immune effector cells to overcome tumor immune escape, thereby providing patients a powerful new treatment option that goes beyond current treatment modalities.

2. Significant Accounting Policies

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 of America (“GAAP”). Certain information and footnote disclosures included in the Company’s annual financial statements have been condensed or omitted. The year-end condensed balance sheet data was derived from audited financial statements, but does not include all disclosures required by GAAP. In the opinion of management, all adjustments (including normal recurring accruals) considered necessary for a fair presentation of the condensed consolidated financial statements have been included. Interim results are not necessarily indicative of results for a full year.

Principles of Consolidation

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

Uses of Estimates in Preparation of Financial Statements

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 at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from these estimates.

Restricted Cash

Restricted cash consists of certificates of deposit held by financial institutions as collateral for the Company’s corporate credit cards.

Leases

The Company follows the provisions of the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 842, “Leases” (“ASC 842”). At the inception of a contract, the Company determines whether the contract is or contains a lease based on all relevant facts and circumstances. For contracts that contain a lease, the Company identifies the lease and non-lease components, determines the consideration in the contract and recognizes the classification of the lease as operating or financing. At the commencement date of the lease, the Company recognizes a liability to make lease payments and an asset representing the right to use the underlying asset during the lease term. The Company has elected not to recognize leases with a term less than one year on the balance sheet.

Lease liabilities and the corresponding right of use assets are recorded based on the present value of lease payments to be made over the lease term. The discount rate used to calculate the present value is the rate implicit in the lease, or if not readily determinable, the Company’s incremental borrowing rate. The Company’s incremental borrowing rate is the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. Certain adjustments to the right of use asset may be required for items such as initial direct costs or incentives received. Lease payments on operating leases are recognized on a straight-line basis over the expected term of the lease. Lease payments on financing leases are recognized using the effective interest method.

Derivative Financial Instruments

The Company follows the provisions of the FASB ASC Topic 815, *“Derivatives and Hedging.”* Financial instruments that meet the definition of a derivative are classified as an asset or liability and measured at fair value on the issuance date and are revalued on each subsequent balance sheet date. The changes in fair value are recognized as current period income or loss. Financial instruments that do not meet the definition of a derivative are classified as equity and measured at fair value and recorded as additional paid in capital in stockholders’ equity at the date of issuance. No further adjustments to their valuation are made.

Fair Value of Financial Instruments

The carrying amounts reported in the balance sheet for restricted cash, accounts payable and accrued expenses approximate their fair values due to their short-term nature.

Research and Development Expenses

Research and development costs relate to compensation and benefits for research and development personnel, facility-related expenses, supplies, external services, costs to acquire technology licenses, expenses associated with preclinical and clinical development activities and other operating costs. Research and development expenses are charged to expense as incurred. Payments made by the Company in advance for research and development services not yet provided and/or for materials not yet received are recorded as prepaid expenses and expensed when the service has been performed or when the goods have been received. Accrued liabilities are recorded related to those expenses for which vendors have not yet billed the Company with respect to services provided and/or materials that it has received.

The Company contracts with third parties to perform various preclinical and clinical activities on its behalf for the continued development of its product candidates. Accruals and expenses are recorded during the period incurred based on such estimates and assumptions as expected cost, passage of time, the achievement of milestones and other information available to us and are assessed on a quarterly basis. Actual results may differ from these estimates and could have a material impact on the Company’s reported results. The Company’s historical accrual estimates have not been materially different from its actual costs.

Stock-based Compensation

The Company follows the provisions of the FASB ASC Topic 718, *“Compensation — Stock Compensation”* (“**ASC 718**”), which requires the measurement and recognition of compensation expense for all stock-based payment awards. Stock compensation expense is based on the grant date fair value estimated in accordance with the provisions of ASC 718 and is recognized as an expense over the requisite service period.

Comprehensive Loss

The Company’s comprehensive loss is equal to its net loss for all periods presented.

Net Loss per Share

The Company accounts for and discloses net loss per share in accordance with the FASB ASC Topic 260, *“Earnings per Share.”* Basic and diluted net loss per share is computed by dividing net loss by the weighted average number of common shares outstanding. Diluted earnings per share is computed by dividing the Company’s net loss by the weighted average number of common shares outstanding and the impact of all dilutive potential common shares.

3. Liquidity and Going Concern

The Company has reported recurring losses from operations since inception and expects that the Company will continue to have negative cash flows from operations for the foreseeable future. Historically, the Company's primary source of funding has been the sale of its securities. The Company's ability to continue to fund its operation 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. 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 us on acceptable terms, or at all. If we fail to obtain additional funding when needed, we would be forced to scale back or terminate our operations or to seek to merge with or to be acquired by another company.

The Company believes that its existing cash and the funds available under its purchase agreements with Lincoln Park Capital Fund, LLC (**LPC**), should be sufficient to fund operations for at least the next 12 months.

4. Recent Accounting Pronouncements

In February 2016, the FASB issued Accounting Standards Update ("ASU") 2016-02, "*Leases (Topic 842)*" ("**Topic 842**"), which requires lessees to recognize a right of use asset and lease liability on the balance sheet for most leases that do not meet the definition of a short-term lease and to disclose key information about leasing arrangements. Leases will continue to be classified as either operating or financing. The Company adopted Topic 842 on January 1, 2019 using the modified retrospective approach and elected to apply the transition method that allows companies to continue applying guidance under the lease standard in effect at that time in the comparative period financial statements and recognize a cumulative-effect adjustment to the balance sheet on the date of adoption. The Company has also elected the package of practical expedients to not reassess its prior conclusions about lease identification, lease classification and indirect costs and to not separate lease and non-lease components.

Upon adoption of Topic 842 on January 1, 2019, the Company recorded a right of use asset of \$28,000 and an operating lease liability of \$28,000. Comparative periods have not been restated. For additional information regarding how the Company is accounting for leases under Topic 842, refer to Note 5.

In November 2018, the FASB issued ASU 2018-18, "*Collaborative Arrangements (Topic 808)*" ("**Topic 808**"), which clarifies the interaction between Topic 808 and ASC Topic 606, "*Revenue from Customers*." The update provides guidance on whether certain transactions between collaborative arrangement participants should be accounted for with revenue under ASC Topic 606 and provide more comparability in the presentation of revenue for certain transactions between collaborative arrangement participants. This will be effective for annual reporting periods beginning after December 15, 2019, including interim periods within that reporting period. The Company does not expect the adoption of Topic 808 to have a material impact on its financial statements.

5. Leases

The Company adopted Topic 842 on January 1, 2019 using the modified retrospective approach and elected to apply the transition method that allows companies to continue applying guidance under the lease standard in effect at that time in the comparative period financial statements and recognize a cumulative-effect adjustment to the balance sheet on the date of adoption. The Company has also elected the package of practical expedients to not reassess its prior conclusions about lease identification, lease classification and indirect costs and to not separate lease and non-lease components. With the adoption of Topic 842, the Company's balance sheet now contains line items for right of use asset, current lease liability and noncurrent lease liability.

The Company determined that it held an operating lease for its office and laboratory space as of January 1, 2019. The Company held no other lease agreements. The Company leases 7,581 square feet of office and laboratory space for its corporate headquarters and primary research facility in Marlborough, Massachusetts. On January 1, 2019, the Company recorded a right of use asset and corresponding lease liability of \$28,000.

On January 22, 2019, the Company amended the lease for its office and laboratory space to extend the term by five years, such that the lease will expire on March 31, 2024. With the amendment, the Company also has the option to terminate the lease after two or three years by providing advance written notice. Due to the extension of the lease agreement, the Company increased the right of use asset and corresponding lease liability by \$592,000.

Additionally, the lease agreements did not contain information to determine the rate implicit in the lease. The Company calculated its incremental borrowing rate based on what the Company would have to pay to borrow on a collateralized basis over the lease term for an amount equal to the remaining lease payments. At September 30, 2019, the weighted average incremental borrowing rate and the weighted average remaining lease term for the Company's operating lease was 4.62% and 4.44 years, respectively.

As of September 30, 2019, the right of use asset and liability arising from the Company's operating lease was \$538,000 and \$542,000, respectively. During the three months ended September 30, 2019, cash paid for the amounts included in the measurement of liabilities was \$31,000 and the Company recorded operating lease expense of \$33,000, which was included in operating expenses on the statement of operations. During the nine months ended September 30, 2019, cash paid for the amounts included in the measurement of liabilities was \$90,000 and the Company recorded operating lease expense of \$94,000.

Future lease payments for non-cancellable operating leases as of September 30, 2019 were as follows, in thousands:

2019 (remaining)	\$	31
2020		128
2021		132
2022		135
2023		139
Thereafter		35
Total undiscounted lease payments		600
Less: Effects of discounting		(58)
Total operating lease liabilities	\$	<u>542</u>

6. Stockholders' Equity

Lincoln Park Capital Fund, LLC – On August 8, 2017, the Company entered into a purchase agreement (the "**2017 Purchase Agreement**") and a registration rights agreement with LPC, pursuant to which the Company has the right to sell to LPC up to \$15,000,000 in shares of the Company's common stock, subject to certain limitations and conditions set forth in the 2017 Purchase Agreement.

No shares of common stock were sold to LPC under the 2017 Purchase Agreement during the three or nine months ended September 30, 2019. During the three months ended September 30, 2018, the Company sold 15,000 shares of common stock to LPC under the 2017 Purchase Agreement for net proceeds of \$21,000. During the nine months ended September 30, 2018, the Company sold 435,000 shares of common stock to LPC under the 2017 Purchase Agreement for net proceeds of \$1,312,000.

On August 7, 2019, the Company entered into a purchase agreement (the "**2019 Purchase Agreement**") and a registration rights agreement with LPC, pursuant to which the Company has the right to sell to LPC up to \$10,000,000 in shares of the Company's common stock, subject to certain limitations and conditions set forth in the 2019 Purchase Agreement. As a commitment fee for entering into the 2019 Purchase Agreement, the Company issued 500,000 shares of the Company's common stock to LPC at a value per share of \$0.3767, which was recorded as a cost of capital. No shares of common stock were sold to LPC under the 2019 Purchase Agreement during the three or nine months ended September 30, 2019.

Warrants — The following table summarizes the Company’s outstanding equity-classified warrants at September 30, 2019:

Summary of Warrants	Exercise prices	Number of Shares Underlying Warrants	Expiration
June 2015 Warrants	\$ 52.00	130,007	June 2, 2020
December 2016 Warrants	\$ 9.00	1,277,793	December 21, 2021
April 2018 Warrants	\$ 3.15	1,132,953	May 31, 2023
Placement Agent Warrants	\$ 4.0546	75,530	April 9, 2023
Pre-Funded Warrants	\$ 0.01	1,164,286	No expiration
October 2018 Warrants	\$ 0.70	21,428,572	October 3, 2025
Underwriter Warrants	\$ 0.875	1,607,143	October 1, 2023
	Total warrants outstanding	<u>26,816,284</u>	

There were no warrants exercised during the three months ended September 30, 2019. During the nine months ended September 30, 2019, the Company received proceeds of \$60,000 from the exercise of Pre-Funded Warrants for a total of 6,004,286 shares of common stock. There were no warrant exercises during the three or nine months ended September 30, 2018.

7. Net Loss per Share

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

	September 30,	
	2019	2018
Options to purchase common stock	145,777	157,514
Unvested, restricted stock	–	73,587
Restricted stock units	517,241	151,250
Warrants to purchase common stock	26,816,284	2,616,283
Total	<u>27,479,302</u>	<u>2,998,634</u>

8. Stock-based Compensation

Stock Options

The Company uses the Black-Scholes option-pricing model to determine the fair value of all its option grants. For valuing options granted during the three and nine months ended September 30, 2019 and 2018, the following assumptions were used:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2019	2018	2019	2018
Risk-free interest rate	N/A	2.93%	1.85 – 2.58%	2.70 – 2.93%
Expected volatility	N/A	161.45%	97.67 – 98.87%	91.28 – 161.45%
Expected lives (in years)	N/A	6.25	5.31	5.50 – 10.00
Expected dividend yield	N/A	0.00%	0.00%	0.00%

There were no options granted during the three months ended September 30, 2019. The weighted average fair value of options granted during the three months ended September 30, 2018 was \$1.72. The weighted average fair value of options granted during the nine months ended September 30, 2019 and 2018 was \$0.30 and \$1.75, respectively.

The risk-free interest rate used for each grant is 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. The expected life assumption for option grants is based upon the simplified method provided for under ASC 718. 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 following table summarizes the activity of the Company's stock options for the nine months ended September 30, 2019:

	Number of Shares	Weighted- Average Exercise Price Per Share	Aggregate Intrinsic Value
Balance at December 31, 2018	141,677	\$ 66.29	-
Granted	15,000	0.40	-
Exercised	-	-	-
Cancelled	(10,900)	60.62	-
Balance at September 30, 2019	<u>145,777</u>	<u>\$ 59.93</u>	<u>\$ -</u>
Exercisable at September 30, 2019	<u>69,454</u>	<u>\$ 123.52</u>	<u>\$ -</u>

Stock-based compensation expense related to stock options for the three months ended September 30, 2019 and 2018 was \$16,000 and \$17,000, respectively. Stock-based compensation expense related to stock options for the nine months ended September 30, 2019 and 2018 was \$53,000 and \$95,000, respectively.

Restricted Stock Units

Restricted stock units ("RSUs") are issued under the Company's 2012 Long Term Incentive Plan (the "Plan") or as inducement grants granted outside of the Plan to new employees. RSUs are generally subject to graded vesting and the satisfaction of service requirements, similar to our stock options. Upon vesting, each outstanding RSU will be exchanged for one share of the Company's common stock. RSU recipients may elect to net share settle upon vesting, in which case the Company pays the employee's income taxes due upon vesting and withholds a number of shares of equal value. The fair value of the RSUs awarded are based on the Company's closing stock price at the grant date and are expensed over the requisite service period.

The following table summarizes the activity of the Company's RSUs for the nine months ended September 30, 2019:

	Number of Shares	Weighted- Average Grant Date Fair Value
Unvested units at December 31, 2018	137,500	\$ 1.79
Granted	477,991	0.41
Vested	(69,750)	1.79
Forfeited	(28,500)	0.79
Unvested units at September 30, 2019	<u>517,241</u>	<u>\$ 0.57</u>

Stock-based compensation expense related to RSUs for the three months ended September 30, 2019 and 2018 was \$31,000 and \$22,000, respectively. Stock-based compensation expense related to RSUs for the nine months ended September 30, 2019 and 2018 was \$110,000 and \$22,000, respectively.

Restricted Stock

On August 31, 2018, and through subsequent amendments on December 19, 2018 and February 14, 2019, Geert Cauwenbergh, Dr. Med. Sc., the Company's former Chief Executive Officer, elected the right to receive, in lieu of cash, for the period from September 15, 2018 to February 28, 2019, up to 50% of his base salary and cash bonuses, if any, (collectively, the "Compensation") payable in the form of unvested, restricted shares of the Company's common stock. Such restricted shares were received in the form of a series of grants made on each Company payroll date in lieu of cash payment of the Compensation. All shares issued in lieu of Compensation vested in full on June 1, 2019.

The fair value of the restricted stock was based on the Company's closing stock price on the date of grant and was expensed over the vesting period. During the nine months ended September 30, 2019, the Company granted 243,032 shares of restricted stock in lieu of Compensation to Dr. Cauwenbergh and recorded \$106,000 in stock-based compensation expense related to the restricted stock. There were no restricted stock issuances under this election or related stock-based compensation expense during the three months ended September 30, 2019.

During the three and nine months ended September 30, 2018, the Company granted 73,587 shares of restricted stock in lieu of Compensation to Dr. Cauwenbergh. There was no stock-based compensation expense recorded to related to the restricted stock during the same period.

Compensation Expense Related to Equity Awards

The following table sets forth total stock-based compensation expense for the three and nine months ended September 30, 2019 and 2018, in thousands:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Research and development	\$ 6	\$ 9	\$ 25	\$ 29
General and administrative	41	30	244	88
Total stock-based compensation	<u>\$ 47</u>	<u>\$ 39</u>	<u>\$ 269</u>	<u>\$ 117</u>

9. Subsequent Events

Subsequent to the balance sheet date, the Company received proceeds of \$7,500 from the exercise of Pre-Funded Warrants for a total of 750,000 shares of common stock.

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

In this document, "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 September 30, 2019 and results of operations for the three and nine months ended September 30, 2019 and 2018 should be read in conjunction with the financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the Securities and Exchange Commission (the "SEC") on March 27, 2019.

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," "should," "potential," "designed to," "will" 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 those identified in our Annual Report on Form 10-K for the year ended December 31, 2018 under the heading "Risk Factors" and in other filings the Company periodically makes with the SEC. 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.

Overview

Phio Pharmaceuticals Corp. is a biotechnology company developing the next generation of immuno-oncology therapeutics based on our self-delivering RNAi ("INTASYL™") therapeutic platform. The Company's efforts are focused on silencing tumor-induced suppression of the immune system through our proprietary INTASYL™ platform with utility in immune cells and/or the tumor micro-environment. Our goal is to develop powerful INTASYL™ therapeutic compounds that can weaponize immune effector cells to overcome tumor immune escape, thereby providing patients a powerful new treatment option that goes beyond current treatment modalities.

Our development efforts are based on our broadly patented INTASYL™ technology platform. Our INTASYL™ compounds do not require a delivery vehicle to penetrate into tissues and cells and are designed to "silence" or down-regulate, the expression of a specific gene which is over-expressed in cancer. We believe that our INTASYL™ platform uniquely positions the Company in the field of immuno-oncology because of this and the following reasons:

- Efficient uptake of INTASYL™ to immune cells obviating the need for facilitated delivery (mechanical or formulation);
- Can target multiple genes (i.e. multiple immunosuppression pathways) in a single therapeutic entity;
- Gene silencing by INTASYL™ has been shown to have a sustained, or long-term, effect *in vivo*;
- Favorable clinical safety profile of INTASYL™ with local administration; and
- Can be readily manufactured under current good manufacturing practices.

The self-delivering nature of our compounds makes INTASYL™ ideally suited for use with adoptive cell transfer (“ACT”) treatments and direct therapeutic use. ACT consists of the infusion of immune cells with antitumor properties. These cells can be derived from unmodified (i.e. naturally occurring) immune cells, immune cells isolated from resected tumors, or genetically engineered immune cells recognizing tumor neoantigens/neoepitopes cells.

Currently, ACT therapies for the treatment of solid tumors face several hurdles. Multiple inhibitory mechanisms restrain immune cells used in ACT from effectively eradicating tumors, including immune checkpoints, reduced cell fitness and cell persistence. Furthermore, the immunosuppressive tumor micro-environment (the “TME”) can pose a formidable barrier to immune cell infiltration and function.

Phio has developed a product platform based on our INTASYL™ technology that allows easy, precise, rapid, and selective non-genetically modified programming of ACT cells (*ex-vivo*, during manufacturing) and of the TME (*in vivo*, by local application), resulting in improved cell-based immunotherapy.

Adoptive Cell Transfer

In ACT, immune cells are isolated from patients, donors or retrieved from allogeneic immune cell banks. The immune cells are then expanded and modified before being returned and used to treat the same patient. We believe our INTASYL™ compounds are ideally suited to be used in combination with ACT, in order to make these immune cells more effective.

ACT includes a number of different types of immunotherapy treatments. These treatments use immune cells, that are grown in a lab to large numbers, followed by administering them to the body to fight the cancer cells. Sometimes, immune cells that naturally recognize a tumor are used, while other times immune cells are modified or “engineered” to make them recognize and kill the cancer cells. There are several types of ACT, including: a.) non-engineered cell therapy in which immune cells are grown from the patient’s tumor or blood, such as tumor infiltrating lymphocytes (“TILs”), or from donor blood or tissue such as natural killer (“NK”) cells, dendritic cells (“DC”) and macrophages, and b.) engineered immune cells that are genetically modified to recognize specific tumor proteins and to remain in an activated state (such as TCRs, CAR T-cells, or CAR-NK cells).

Our approach to immunotherapy builds on well-established methodologies of ACT and involves the treatment of immune cells with our INTASYL™ compounds while they are grown in the lab and before administering them to the patient. Because our INTASYL™ compounds do not require a delivery vehicle to penetrate into the cells, we are able to enhance the function of these cells (for example, by inhibiting the expression of immune checkpoint genes) by merely adding our INTASYL™ compounds during the expansion process and without the need for genetic engineering. After enhancing these cells *ex vivo*, they are returned to the patient for treatment.

We have a number of collaborations with leading academic centers and corporate institutions. Corporate collaborators include, but are not limited to, Iovance Biotherapeutics, Inc., Glycostem Therapeutics BV and Carisma Therapeutics, Inc. Data developed in-house and with our collaborators has shown that PH-762, our lead pipeline compound, can elicit PD-1 checkpoint blockade by silencing PD-1 receptor expression resulting in enhanced T cell activation and tumor cytotoxicity. We have also shown that PH-804, our second pipeline compound, can silence the expression of TIGIT in NK cells and T cells, overcoming their exhaustion and thereby becoming “weaponized.”

Recent data shown by the Company and two of its collaborators, Iovance Biotherapeutics, Inc. and the Karolinska Institutet, at the 2019 Society for Immunotherapy of Cancer annual meeting further supports the application of INTASYL™ technology in immunotherapy of cancer. PH-762, our most advanced program, has shown to silence the expression of checkpoint molecule PD-1 in target human T cells in a potent and durable manner suitable for both ACT and intratumoral injection, and increases function of patient derived TILs for ACT. The application of INTASYL™ compounds to novel immuno-oncology targets was shown by the silencing of BRD4 by a BRD4 targeting INTASYL™ compound in human T cells during expansion for ACT, which has the potential to confer superior anti-tumor activity.

We expect to enter the clinic with PH-762 in ACT therapy for solid tumors, such as in melanoma, in the first half of 2020.

Tumor Micro-Environment

We are exploring the use of our INTASYL™ compounds directly towards TME targets, including using PH-762 and PH-804 in such applications. We are also working on other relevant compounds for TME targets. One of those is PH-790, an INTASYL™ compound targeting PD-L1, a protein found on tumor cells telling the T cells to leave them alone and not attack it. Impacting the tumor cells and/or the TME through a direct use of INTASYL™, locally administered directly into the tumor, could potentially become an important form of (neo)adjuvant therapy. We believe that this will also show that our contributions with our INTASYL™ compounds in immuno-oncology are not limited to use with a cell therapy platform. Additionally, the Company has shown in a clinical setting that its INTASYL™ compounds are safe and well-tolerated following local administration.

Our collaborative research agreement with Gustave Roussy, a leading comprehensive cancer center in France, concentrates on determining the feasibility of our INTASYL™ platform to target the TME via intra-tumoral injection. Our completed *in-vivo* study with Gustave Roussy demonstrated that an INTASYL™ compound delivered via intra-tumoral injection showed silencing of gene expression with our INTASYL™ compounds with greater than 90% reduction of the target gene expression in a mouse model of melanoma.

The Company expects to move PH-762 or PH-790 for intratumoral injection into the clinical development stage in the second half of 2020.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations is based upon our financial statements, which have been prepared in accordance with GAAP. The preparation of these 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. Other than our accounting policy for leases in connection with the adoption of Topic 842 on January 1, 2019, as described below, there have been no significant changes to our critical accounting policies since the beginning of this fiscal year. Our critical accounting policies are described in the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of our Annual Report on Form 10-K for the year ended December 31, 2018, which we filed with the SEC on March 27, 2019.

Leases

The Company follows the provisions of the FASB ASC 842. At the inception of a contract, the Company determines whether the contract is or contains a lease based on all relevant facts and circumstances. For contracts that contain a lease, the Company identifies the lease and non-lease components, determines the consideration in the contract and recognizes the classification of the lease as operating or financing. At the commencement date of the lease, the Company recognizes a liability to make lease payments and an asset representing the right to use the underlying asset during the lease term. The Company has elected not to recognize leases with a term less than one year on the balance sheet.

Lease liabilities and the corresponding right of use assets are recorded based on the present value of lease payments to be made over the lease term. The discount rate used to calculate the present value is the rate implicit in the lease, or if not readily determinable, the Company’s incremental borrowing rate. The Company’s incremental borrowing rate is the rate of interest that we would have to pay to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. Certain adjustments to the right of use asset may be required for items such as initial direct costs or incentives received. Lease payments on operating leases are recognized on a straight-line basis over the expected term of the lease. Lease payments on financing leases are recognized using the effective interest method.

Results of Operations

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

Description	Three Months Ended September 30,			Nine Months Ended September 30,		
	2019	2018	Dollar Change	2019	2018	Dollar Change
Revenues	\$ —	\$ 57	\$ (57)	\$ 21	\$ 138	\$ (117)
Operating expenses	(2,113)	(1,549)	(564)	(6,339)	(5,768)	(571)
Operating loss	(2,113)	(1,492)	(621)	(6,318)	(5,630)	(688)
Net loss	(2,094)	(1,493)	(601)	(6,248)	(5,633)	(615)

Comparison of the Three and Nine Months Ended September 30, 2019 and 2018

Revenues

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

Description	Three Months Ended September 30,		Dollar Change	Nine Months Ended September 30,		Dollar Change
	2019	2018		2019	2018	
Revenues	\$ —	\$ 57	\$ (57)	\$ 21	\$ 138	\$ (117)

Revenues for the nine months ended September 30, 2019 and three and nine months ended September 30, 2018 related to the work performed by the Company as a sub-awardee under the government grant issued to our collaborator BioAxone Biosciences, Inc. from the National Institute of Neurological Disorders and Stroke. The grant provided funding for the development of a novel INTASYL™ compound, BA-434, that targets PTEN for the treatment of spinal cord injury. Work performed by the Company as a sub-awardee under the grant was completed during the first quarter of 2019.

Operating Expenses

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

Description	Three Months Ended September 30,		Dollar Change	Nine Months Ended September 30,		Dollar Change
	2019	2018		2019	2018	
Research and development	\$ 1,042	\$ 838	\$ 204	\$ 3,277	\$ 3,382	\$ (105)
General and administrative	1,071	711	360	3,062	2,386	676
Total operating expenses	\$ 2,113	\$ 1,549	\$ 564	\$ 6,339	\$ 5,768	\$ 571

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, expenses associated with preclinical and clinical development activities and other operating costs.

Research and development expenses for the three months ended September 30, 2019 increased 24% as compared with the three months ended September 30, 2018, primarily due to an increase in consulting and outside professional service fees in support of preclinical research for the Company's immuno-oncology programs.

Research and development expenses for the nine months ended September 30, 2019 decreased 3% as compared with the nine months ended September 30, 2018, primarily due to decreases in clinical-trial related expenses with the completion of the Company's legacy clinical trials and payroll-related expenses from a decrease in headcount as compared to the prior year period offset by increases in consulting and outside professional service fees in support of preclinical research for the Company's immuno-oncology programs.

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, audit, tax and consulting services, as well as other general corporate expenses.

General and administrative expenses for the three months ended September 30, 2019 increased 51% as compared with the three months ended September 30, 2018, primarily driven by an increase in payroll-related expenses and legal fees.

General and administrative expenses for the nine months ended September 30, 2019 increased 28% as compared with the nine months ended September 30, 2018, primarily due to increases in professional fees for legal related expenses and recruiting fees to support employee hiring activities and increase in stock-based compensation expense related to the restricted stock issued to the Company's former Chief Executive Officer in lieu of cash compensation as compared to the prior year period.

Liquidity and Capital Resources

Sources of Capital

On August 8, 2017, the Company entered into the 2017 Purchase Agreement with LPC. To date, the Company has sold a total of 495,000 shares of common stock to LPC under the 2017 Purchase Agreement for net proceeds of \$1,602,000. The Company has approximately \$13,300,000 remaining under the 2017 Purchase Agreement with LPC, which expires at the end of the first quarter of 2020.

On August 7, 2019, the Company entered into the 2019 Purchase Agreement with LPC. The 2019 Purchase Agreement initially limits the Company's issuance of shares of common stock to LPC to 19.99% of the Company's shares outstanding on the date of the Purchase Agreement unless stockholder approval is obtained to issue more than such amount or the average price of all sales under the 2019 Purchase Agreement exceed certain amounts as set forth in the 2019 Purchase Agreement. As a commitment fee for entering into the 2019 Purchase Agreement, the Company issued 500,000 shares of the Company's common stock to LPC. To date, no shares of common stock have been sold to LPC under the 2019 Purchase Agreement.

We had cash of \$8,709,000 as of September 30, 2019, compared to \$14,879,000 as of December 31, 2018. 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. Historically, the Company's primary source of funding has been the sale of its 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. There is no guarantee that debt, additional equity or other funding will be available to us on acceptable terms, or at all. If we fail to obtain additional funding when needed, we would be forced to scale back or terminate our operations or to seek to merge with or to be acquired by another company. We believe that our existing cash should be sufficient to fund our operations for at least the next 12 months.

Cash Flow

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

	Nine Months Ended	
	September 30,	
	2019	2018
Net cash used in operating activities	\$ (6,099)	\$ (5,774)
Net cash used in investing activities	(77)	-
Net cash provided by financing activities	6	5,433
Net decrease in cash and restricted cash	<u>\$ (6,170)</u>	<u>\$ (341)</u>

Net Cash Flow from Operating Activities

Net cash used in operating activities was \$6,099,000 for the nine months ended September 30, 2019, as compared to \$5,774,000 for the nine months ended September 30, 2018. The increase in cash used in operating activities of \$325,000 was primarily attributable to an increase in net loss offset by non-cash related adjustments.

Net Cash Flow from Investing Activities

Net cash used in investing activities for the nine months ended September 30, 2019 was \$77,000. There were no net cash flows related to investing activities for the nine months ended September 30, 2018. The increase in net cash flow used in investing activities was primarily related to the purchase of office and lab equipment.

Net Cash Flow from Financing Activities

Net cash provided by financing activities was minimal for the nine months ended September 30, 2019, as compared to \$5,433,000 for the nine months ended September 30, 2018. The decrease in cash provided by financing activities was primarily due to net financing costs during the period for the Company's financing activities as compared to the net proceeds received by the Company from the April 2018 Offering during the same prior year period.

Off-Balance Sheet Arrangements

In connection with certain license agreements, we are required to indemnify the licensor for certain damages arising in connection with the intellectual property rights licensed under the agreement. In addition, we are a party to a number of agreements entered into in the ordinary course of business that contain typical provisions that obligate us to indemnify the other parties to such agreements upon the occurrence of certain events. These indemnification obligations are considered off-balance sheet arrangements in accordance with ASC Topic 460, "*Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*." To date, we have not encountered material costs as a result of such obligations and have not accrued any liabilities related to such obligations in our financial statements. See Note 5 to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the SEC on March 27, 2019, for further discussion of these indemnification agreements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer, evaluated the effectiveness of our 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 SEC 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 concluded that our disclosure controls and procedures were effective 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 nine months ended September 30, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, the Company is party to legal proceedings. There are none deemed to be material at this time.

ITEM 1A. RISK FACTORS

Please carefully consider the information set forth in Part I, “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018 filed with the SEC on March 27, 2019. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. 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.

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

On November 2, 2018, we received written notice (the “**Notification Letter**”) from the Nasdaq Stock Market (“**Nasdaq**”) notifying us that we are not in compliance with the minimum bid price requirements set forth in Nasdaq Listing Rule 5550(a)(2) for continued listing on The Nasdaq Capital Market. Nasdaq Listing Rule 5550(a)(2) requires listed securities to maintain a minimum bid price of \$1.00 per share, and 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. Based on the closing bid price of our common stock for the 30 consecutive business days prior to the date of the Notification Letter, we no longer meet the minimum bid price requirement.

The Notification Letter provided an initial 180-day period to regain compliance, which was extended for a second 180-day period on May 14, 2019. As a result of the extension, we had until November 11, 2019 to regain compliance by maintaining a closing bid price of at least \$1.00 per share for a minimum of 10 consecutive business days. We failed to regain compliance by that date, and accordingly we expect that Nasdaq will commence delisting proceedings. We plan to appeal Nasdaq’s delisting but we may not be successful in such appeal. If we are unsuccessful in our efforts to remain listed on Nasdaq, our common stock will trade, if at all, on the over-the counter market, such as the OTC Bulletin Board or OTCQX market, which could adversely impact us by, among other things, reducing the liquidity and market price of our common stock; reducing the number of investors willing to hold or acquire our common stock; limiting our ability to issue additional securities in the future; and limiting our ability to fund our operations.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

In October 2019, John Barrett, Ph.D., the Company’s Chief Development Officer, resigned from his position with the Company to pursue another opportunity.

ITEM 6. EXHIBITS

EXHIBIT INDEX

Exhibit Number	Description	Incorporated by Reference Herein	
		Form	Date
3.1	Amended and Restated Bylaws of Phio Pharmaceuticals Corp. *		
10.1	Phio Pharmaceuticals Corp. 2012 Long Term Incentive Plan *		
31.1	Sarbanes-Oxley Act Section 302 Certification of Chief Executive Officer and Chief Financial Officer. *		
32.1	Sarbanes-Oxley Act Section 906 Certification of Chief Executive Officer and Chief Financial Officer. *		
101	The following financial information from the Quarterly Report on Form 10-Q of Phio Pharmaceuticals Corp. for the quarter ended September 30, 2019, formatted in XBRL (eXtensible Business Reporting Language): (1) Condensed Consolidated Balance Sheets as of September 30, 2019 and December 31, 2018; (2) Condensed Consolidated Statements of Operations for the Three and Nine Months Ended September 30, 2019 and 2018; (3) Condensed Consolidated Statements of Stockholders' Equity for the Three and Nine Months Ended September 30, 2019 and 2018; (4) Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2019 and 2018; and (5) Notes to Condensed Consolidated Financial Statements (Unaudited).*		

* Furnished herewith.

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.

Phio Pharmaceuticals Corp.

By: /s/ Gerrit Dispersyn
Gerrit Dispersyn, Dr. Med. Sc.
President and Chief Executive Officer

Date: November 12, 2019

**PHIO PHARMACEUTICALS CORP. (the “Corporation”)
FIFTH AMENDED & RESTATED BYLAWS**

SECTION 1—STOCKHOLDERS

Section 1.1. Annual Meeting. An annual meeting of the stockholders for the election of directors to succeed those whose term expire and for the transaction of such other business as may properly come before the meeting shall be held at the place, if any, within or without the State of Delaware, on the date and at the time that the board of directors of the Corporation (the “Board of Directors”) shall each year fix. Unless stated otherwise in the notice of the annual meeting of the stockholders of the Corporation, such annual meeting shall be at the principal office of the Corporation.

Section 1.2. Advance Notice of Nominations and Proposals of Business.

(a) Nominations of persons for election to the Board of Directors and proposals for business to be transacted by the stockholders at an annual meeting of stockholders may be made (i) pursuant to the Corporation’s notice with respect to such meeting, (ii) by or at the direction of the Board of Directors or (iii) by any stockholder of record of the Corporation who (A) was a stockholder of record at the time of the giving of the notice contemplated in Section 1.2(b), (B) is entitled to vote at such meeting and (C) has complied with the notice procedures set forth in this Section 1.2. Clause (iii) of this Section 1.2 shall be the exclusive means for a stockholder to make nominations or propose other business (other than matters properly brought pursuant to applicable provisions of federal law, including the Securities Exchange Act of 1934 (as amended from time to time, the “Act”)) before an annual meeting of stockholders.

(b) For nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 1.2(a), (i) the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation with the information contemplated by Section 1.2(c), and (ii) the business must be a proper matter for stockholder action under the Delaware General Corporation Law (the “DGCL”).

(c) To be timely, a stockholder’s notice must be delivered to the Secretary of the Corporation at the principal executive offices of the Corporation a date (i) not fewer than 90 nor more than 120 days prior to the anniversary date of the prior year’s annual meeting or (ii) if there was no annual meeting in the prior year or if the date of the current year’s annual meeting is more than 30 days before or after the anniversary date of the prior year’s annual meeting, on or before 10 days after the day on which the date of the current year’s annual meeting is first disclosed in a public announcement. In no event shall any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period for the delivery of such notice. Such notice from a stockholder must state (i) as to each nominee that the stockholder proposes for election or reelection as a director, (A) all information relating to such nominee that would be required to be disclosed in solicitations of proxies for the election of such nominee as a director pursuant to Regulation 14A under the Act and such nominee’s written consent to serve as a director if elected, and (B) a description of all direct and indirect compensation and other material monetary arrangements, agreements or understandings during the past three years, and any other material relationship, if any, between or concerning such stockholder and its respective affiliates or associates, or others with whom they are acting in concert, on the one hand, and the proposed nominee, and his or her respective affiliates or associates, on the other hand; (ii) as to each proposal that the stockholder seeks to bring before the meeting, a brief description of such proposal, the reasons for making the proposal at the meeting, and any material interest that the stockholder has in the proposal; (iii) (A) the name and address of the stockholder, (B) the class (and, if applicable, series) and number of shares of stock of the Corporation that are, directly or indirectly, owned beneficially or of record by the stockholder or any Stockholder Associated Person (as defined below), (C) any option, warrant, convertible security, stock appreciation right or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class (or, if applicable, series) of shares of stock of the Corporation or with a value derived in whole or in part from the value of any class (or, if applicable, series) of shares of stock of the Corporation, whether or not such instrument or right shall be subject to settlement in the underlying class or series of capital stock of the Corporation or otherwise (each, a “Derivative Instrument”) directly or indirectly owned beneficially or of record by such stockholder or any Stockholder Associated Person and any other direct or indirect opportunity to profit or share in any profit derived from any increase or decrease in the value of shares of stock of the Corporation of the stockholder or any Stockholder Associated Person, (D) any proxy, contract, arrangement, understanding or relationship pursuant to which such stockholder or any Stockholder Associated Person has a right to vote any securities of the Corporation, (E) any proportionate interest in shares of the Corporation or Derivative Instruments held, directly or indirectly, by a general or limited partnership in which such stockholder or any Stockholder Associated Person is a general partner or beneficially owns an interest in a general partner, (F) any performance-related fees (other than an asset-based fee) that such stockholder or any Stockholder Associated Person is entitled to based on any increase or decrease in the value of the shares of stock of the Corporation or Derivative Instruments and (G) whether either the stockholder intends to deliver a proxy statement and form of proxy to holders of, in the case of a proposal, at least the percentage of the Corporation’s voting shares required under applicable law to carry the proposal or, in the case of a nomination or nominations, a sufficient number of holders of the Corporation’s voting shares reasonably believed by such stockholder to be sufficient to elect such nominee or nominees. For purposes of these bylaws, a “Stockholder Associated Person” of any stockholder means (i) any “affiliate” or “associate” (as those terms are defined in Rule 12b-2 under the Act) of the stockholder that owns beneficially or of record any capital stock or other securities of the Corporation and (ii) any person acting in concert with such stockholder or any affiliate or associate of such stockholder with respect to the capital stock or other securities of the Corporation. In addition, any nominee proposed by a stockholder shall complete a questionnaire, in a form provided by the Corporation, within 10 days of receipt of the form of questionnaire from the Corporation.

(d) Subject to the certificate of incorporation of the Corporation (as amended from time to time, the "Certificate of Incorporation") and applicable law, only persons nominated in accordance with procedures stated in this Section 1.2 shall be eligible for election as and to serve as a member of the Board of Directors and the only business that shall be conducted at an annual meeting of stockholders is the business that has been brought before the meeting in accordance with the procedures set forth in this Section 1.2. The chairman of the meeting shall have the power and the duty to determine whether a nomination or any proposal has been made according to the procedures stated in this Section 1.2 and, if any nomination or proposal does not comply with this Section 1.2, unless otherwise required by law, the nomination or proposal shall be disregarded.

(e) For purposes of this Section 1.2, "public announcement" means disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Act.

(f) Notwithstanding the foregoing provisions of this Section 1.2, a stockholder shall also comply with all applicable requirements of the Act and the rules and regulations thereunder with respect to matters set forth in this Section 1.2. Nothing in this Section 1.2 shall affect any rights, if any, of stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to applicable provisions of federal law, including the Act.

Section 1.3. Special Meetings; Notice.

Special meetings of the stockholders of the Corporation may be called only in the manner set forth in the Certification of Incorporation. Notice of every special meeting of the stockholders of the Corporation shall state the purpose of such meeting. Except as otherwise required by law, the business conducted at a special meeting of stockholders of the Corporation shall be limited exclusively to the business set forth in the Corporation's notice of meeting, and the individual or group calling such meeting shall have exclusive authority to determine the business included in such notice.

Section 1.4. Notice of Meetings.

Notice of the place, if any, date and time of all meetings of stockholders of the Corporation, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed present and vote at such meeting, and, in the case of all special meetings of stockholders, the purpose of the meeting, shall be given, not fewer than 10 nor more than 60 days before the date on which such meeting is to be held, to each stockholder entitled to notice of the meeting.

The Corporation may postpone or cancel any annual or special meeting of stockholders of the Corporation that was previously called by the Board of Directors by making a public announcement (as defined in Section 1.2(e)) of such postponement or cancellation prior to the meeting. When a previously called annual or special meeting is postponed to another time or place, if any, notice of the place (if any), date and time of the postponed meeting and the means of remote communications, if any, by which stockholders and proxy holders may be deemed present and vote at such postponed meeting, shall be given in conformity with this Section 1.4 unless such meeting is postponed not more than 120 days after initial notice of the meeting was provided in conformity with this Section 1.4.

When a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time and place, if any, thereof and the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken; however, if the date of any adjourned meeting is more than 30 days after the date for which the meeting was originally noticed, or if a new record date is fixed for the adjourned meeting, notice of the place, if any, date and time of the adjourned meeting and the means of remote communication, if any, by which stockholders and proxy holders may be deemed present and vote at such adjourned meeting, shall be given in conformity herewith. At any adjourned meeting, any business may be transacted that may have been transacted at the original meeting.

Section 1.5. Quorum.

At any meeting of the stockholders, the holders of shares of stock of the Corporation entitled to cast at least one third of the total votes entitled to be cast by the holders of all outstanding capital stock of the Corporation, present in person or by proxy, shall constitute a quorum for all purposes, unless or except to the extent that the presence of a larger number is required by applicable law or the Certificate of Incorporation. If a separate vote by one or more classes or series is required, the holders of shares entitled to cast at least one third of the total votes entitled to be cast by the holders of the shares of the class or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter.

If a quorum shall fail to attend any meeting, the chairman of the meeting may adjourn the meeting to another place, if any, date and time.

Section 1.6. Organization.

The Chairman of the Board or, in his or her absence, the person whom the Board of Directors designates or, in the absence of that person or the failure of the Board of Directors to designate a person, the Chief Executive Officer of the Corporation or, in his or her absence, the person chosen by the holders of a majority of the shares entitled to vote who are present, in person or by proxy, shall call to order any meeting of the stockholders of the Corporation and act as chairman of the meeting. In the absence of the Secretary of the Corporation, the secretary of the meeting shall be the person the chairman appoints.

Section 1.7. Conduct of Business.

The chairman of any meeting of stockholders of the Corporation shall determine the order of business and the rules of procedure for the conduct of such meeting, including the manner of voting and the conduct of discussion as he or she determines to be in order. The chairman shall have the power to adjourn the meeting to another place, if any, date and time. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting.

Section 1.8. Proxies; Inspectors.

(a) At any meeting of the stockholders, every stockholder entitled to vote may vote in person or by proxy authorized by an instrument in writing or by a transmission permitted by applicable law.

(b) Prior to a meeting of the stockholders of the Corporation, the Corporation shall appoint one or more inspectors to act at a meeting of stockholders of the Corporation and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the meeting may, and to the extent required by applicable law, shall, appoint one or more inspectors to act at the meeting. Each inspector, before beginning the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of inspectors. The inspectors shall have the duties prescribed by applicable law.

Section 1.9. Voting.

Except as otherwise required by applicable law or by the Certificate of Incorporation, all matters other than the election of directors shall be determined by a majority of the votes cast on the matter affirmatively or negatively. All elections of directors shall be determined by a plurality of the votes cast.

Section 1.10. Stock List.

A complete list of stockholders of the Corporation entitled to vote at any meeting of stockholders of the Corporation, arranged in alphabetical order for each class of stock and showing the address of each such stockholder and the number of shares registered in the name of such stockholder, shall be open to the examination of any such stockholder, for any purpose germane to a meeting of the stockholders of the Corporation, for a period of at least 10 days before the meeting (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting or (ii) during ordinary business hours at the principal place of business of the Corporation; provided, however, if the record date for determining the stockholders entitled to vote is less than 10 days before the meeting date, the list shall reflect the stockholders entitled to vote as of the 10th day before such meeting date.

The stock list shall also be open to the examination of any such stockholder during the entire meeting. The Corporation may look to this list as the sole evidence of the identity of the stockholders entitled to vote at a meeting and the number of shares held by each stockholder.

SECTION 2—BOARD OF DIRECTORS

Section 2.1. Number of Directors; Qualifications of Directors.

The number of directors constituting the Board of Directors shall be not fewer than 2 and not more than 6. Subject to the previous sentence and the special right of the holders of any class or series of stock to elect directors, the precise number of directors shall be fixed from time to time exclusively by the Board of Directors pursuant to a resolution adopted by a majority of the total number of directors that the Corporation would have if there were no vacancies. Directors need not be stockholders to be qualified for election or service as a director of the Corporation.

Section 2.2. Removal; Resignation.

Any director or the entire Board of Directors may be removed by the holders of a majority of the shares then entitled to vote at an election of directors. Any director may resign at any time upon notice given in writing, including by electronic transmission, to the Corporation.

Section 2.3. Regular Meetings.

Regular meetings of the Board of Directors shall be held at the place (if any), on the date and at the time as shall have been established by the Board of Directors and publicized among all directors. A notice of a regular meeting, the date of which has been so publicized, shall not be required.

Section 2.4. Special Meetings.

Special meetings of the Board of Directors may be called by the President or by two or more directors then in office and shall be held at the place, if any, on the date and at the time as he, she or they shall fix. Notice of the place, if any, date and time of each special meeting shall be given to each director either (a) by mailing written notice thereof not fewer than five days before the meeting, or (b) by telephone, facsimile or electronic transmission providing notice thereof not fewer than twenty-four hours before the meeting. Unless otherwise stated in the notice thereof, any and all business may be transacted at a special meeting of the Board of Directors.

Section 2.5. Quorum.

At any meeting of the Board of Directors, a majority of the total number of directors then in office shall constitute a quorum for all purposes. If a quorum shall fail to attend any meeting, a majority of those present may adjourn the meeting to another place, if any, date or time, without further notice or waiver thereof.

Section 2.6. Participation in Meetings By Conference Telephone or Other Communications Equipment

Members of the Board of Directors, or of any committee thereof, may participate in a meeting of the Board of Directors or committee thereof by means of conference telephone or other communications equipment by means of which all directors participating in the meeting can hear each other director, and such participation shall constitute presence in person at the meeting.

Section 2.7. Conduct of Business.

At any meeting of the Board of Directors, business shall be transacted in the order and manner that the Board of Directors may from time to time determine, and all matters shall be determined by the vote of a majority of the directors present, except as otherwise provided in the Certificate of Incorporation or these bylaws or required by applicable law. The Board of Directors or any committee thereof may take action without a meeting if all members thereof consent thereto in writing or by electronic transmission, and the writing or writings, or electronic transmission or electronic transmissions, are filed with the minutes of proceedings of the Board of Directors or any committee thereof. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 2.8. Compensation of Directors.

The Board of Directors shall be authorized to fix the compensation of directors. The directors of the Corporation shall be paid their expenses, if any, of attendance at each meeting of the Board of Directors and shall be reimbursed a fixed sum for attendance at each meeting of the Board of Directors, paid an annual retainer or paid other compensation, including equity compensation, as directors of the Corporation. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. Members of committees shall be paid compensation for attending committee meetings and/or have their expenses, if any, of attendance of each meeting of such committee reimbursed.

SECTION 3—COMMITTEES

Section 3.1. Committees of the Board of Directors.

The Board of Directors may designate committees of the Board of Directors, with such lawfully delegable powers and duties as it thereby confers, to serve at the pleasure of the Board of Directors and shall, for those committees, appoint a director or directors to serve as the member or members, designating, if it desires, other directors as alternate members who may replace any absent or disqualified member at any meeting of such committee. In the absence or disqualification of any member of any committee and any alternate member in his or her place, the member or members of the committee present at the meeting and not disqualified from voting, whether or not he or she or they constitute a quorum, may by unanimous vote appoint another member of the Board of Directors to act at the meeting in the place of the absent or disqualified member.

SECTION 4—OFFICERS

Section 4.1. Generally.

The officers of the Corporation shall consist of a President, one or more Vice Presidents, a Secretary, a Treasurer and other officers as may from time to time be appointed by the Board of Directors. Each officer shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal. Any number of offices may be held by the same person. The salaries of officers appointed by the Board of Directors shall be fixed from time to time by the Board of Directors or a committee thereof or by the officers as may be designated by resolution of the Board of Directors.

Section 4.2. President.

Unless otherwise determined by the Board of Directors, the President shall be the Chief Executive Officer of the Corporation. Subject to the provisions of these bylaws and to the direction of the Board of Directors, he or she shall have the responsibility for the general management and control of the business and affairs of the Corporation and shall perform all duties and have all powers that are commonly incident to the office of chief executive or which are delegated to him or her by the Board of Directors. He or she shall have the power to sign all contracts and other instruments of the Corporation that are authorized and shall have general supervision and direction of all of the other officers, employees and agents of the Corporation.

Section 4.3. Vice President.

Each Vice President shall have the powers and duties delegated to him or her by the Board of Directors or the President. One Vice President may be designated by the Board of Directors to perform the duties and exercise the powers of the President in the event of the President's absence or disability.

Section 4.4. Treasurer.

The Treasurer shall have the responsibility for maintaining the financial records of the Corporation. He or she shall make such disbursements of the funds of the Corporation as are authorized and shall render from time to time an account to the Board of Directors of all such transactions and of the financial condition of the Corporation. The Treasurer shall also perform other duties as the Board of Directors may from time to time prescribe.

Section 4.5. Secretary.

The Secretary shall issue all authorized notices for, and shall keep minutes of, all meetings of the stockholders and the Board of Directors. He or she shall have charge of the corporate books and shall perform other duties as the Board of Directors may from time to time prescribe.

Section 4.6. Delegation of Authority.

The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

Section 4.7. Removal.

The Board of Directors may remove any officer of the Corporation at any time, with or without cause.

Section 4.8. Action with Respect to Securities of Other Companies

Unless otherwise directed by the Board of Directors, the President, or any officer of the Corporation authorized by the President, shall have power to vote and otherwise act on behalf of the Corporation, in person or by proxy, at any meeting of stockholders or equityholders of, or with respect to any action of, stockholders or equityholders of any other entity in which the Corporation may hold securities and otherwise to exercise any and all rights and powers that the Corporation may possess by reason of its ownership of securities in such other entity.

SECTION 5—STOCK

Section 5.1. Certificates of Stock.

Shares of the capital stock of the Corporation shall be uncertificated, as permitted by the DGCL.

Section 5.2. Transfers of Stock.

Transfers of stock shall be made only upon the transfer books of the Corporation kept at an office of the Corporation (within or without the State of Delaware) or by transfer agents designated to transfer shares of the stock of the Corporation.

Section 5.3. Regulations.

The issue, transfer, conversion and registration of shares of stock of the Corporation shall be governed by other regulations as the Board of Directors may establish.

Section 5.4. Record Date.

(a) In order for the Corporation to determine the stockholders of the Corporation entitled to notice of any meeting of stockholders of the Corporation, the Board of Directors may, except as otherwise required by applicable law, fix a record date, which record date shall not precede the date on which the resolution fixing the record date is adopted and which record date shall not be more than 60 nor fewer than 10 days before the date of any meeting of stockholders. If the Board of Directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board of Directors determines that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of and to vote at a meeting of stockholders of the Corporation shall be at the close of business on the day next preceding the day on which notice is given or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(b) A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders of the Corporation shall apply to any postponement or adjournment of the meeting, provided, that the Board of Directors may fix a new record date for determination of the stockholders entitled to vote at a postponed or adjourned meeting, and in such case shall also fix the record date of the stockholders entitled to notice of such postponed or adjourned meeting at the same or on an earlier date as that fixed for determination of the stockholders entitled to vote at the postponed or adjourned meeting.

SECTION 6—NOTICES

Section 6.1. Notices.

If mailed, notice to a stockholder of the Corporation shall be deemed given when deposited in the mail, postage prepaid, directed to a stockholder at such stockholder's address as it appears on the records of the Corporation. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders of the Corporation may be given by electronic transmission in the manner provided in Section 232 of the DGCL.

Section 6.2. Waivers.

A written waiver of any notice, signed by a stockholder or director, or a waiver by electronic transmission by such person or entity, whether given before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such person or entity. Neither the business nor the purpose of any meeting need be specified in the waiver. Attendance at any meeting shall constitute waiver of notice except attendance for the sole purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

SECTION 7—MISCELLANEOUS

Section 7.1. Corporate Seal.

The Board of Directors may provide a suitable seal, containing the name of the Corporation, which seal shall be in the charge of the Secretary. If and when so directed by the Board of Directors, duplicates of the seal may be kept and used by the Treasurer or by an Assistant Secretary or Assistant Treasurer.

Section 7.2. Reliance upon Books, Reports, and Records.

Each director and each member of any committee designated by the Board of Directors of the Corporation shall, in the performance of his or her duties, be fully protected in relying in good faith upon the books and records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of its officers, agents or employees, or committees of the Board of Directors so designated, or by any other person or entity as to matters that such director or committee member reasonably believes are within such other person's or entity's professional or expert competence and that has been selected with reasonable care by or on behalf of the Corporation.

Section 7.3. Fiscal Year.

The fiscal year of the Corporation shall be as fixed by the Board of Directors.

Section 7.4. Time Periods.

In applying any provision of these bylaws that requires that an act be done or not be done a specified number of days before an event or that an act be done during a specified number of days before an event, calendar days shall be used, the day of the doing of the act shall be excluded, and the day of the event shall be included.

SECTION 8—AMENDMENTS

These bylaws may be altered, amended or repealed in accordance with the Certificate of Incorporation.

SECTION 9—INDEMNIFICATION AND ADVANCEMENT OF EXPENSES

Section 9.1. Indemnification and Advancement of Expenses.

The Corporation shall indemnify and advance expenses to, and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an “Indemnitee”) who was or is made, or is threatened to be made, a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a “Proceeding”), by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was a director or an officer of the Corporation or, while a director or an officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee, member, trustee or agent of another corporation or of a partnership, joint venture, trust, nonprofit entity or other enterprise (including, but not limited to, service with respect to employee benefit plans), against all liability and loss suffered (including, but not limited to, expenses (including, but not limited to, attorneys’ fees and expenses), judgments, fines and amounts paid in settlement and reasonably incurred by such Indemnitee). Notwithstanding the preceding sentence, the Corporation shall be required to indemnify, or advance expenses to, an Indemnitee in connection with a Proceeding (or part thereof) commenced by such Indemnitee only if the commencement of such Proceeding (or part thereof) by the Indemnitee was authorized by the Board of Directors of the Corporation or the Proceeding (or part thereof) relates to the enforcement of the Corporation’s obligations under this Section 9.1.

Section 9.2. Insurance.

The Corporation shall purchase and maintain insurance on behalf of any person who is or was a director, officer, trustee, employee or agent of the Corporation, or was serving at the request of the Corporation as a director, officer, trustee, employee or agent of another corporation, partnership, joint venture, trust, non-profit entity or other enterprise (including, but not limited to, service with respect to employee benefit plans), against any liability asserted against the person and incurred by the person in any such capacity, or arising out of his or her status as such, whether or not the Corporation would have the power or the obligation to indemnify such person against such liability under the provisions of this Section 9.

Section 9.3. Non-Exclusivity of Rights.

The indemnification provided by this Section 9 is not exclusive of other indemnification rights arising under any bylaw, agreement, vote of directors or stockholders or otherwise, and shall inure to the benefit of the heirs and legal representatives of such Indemnitee.

Section 9.4. Fulfillment of Standard of Conduct.

Any Indemnitee shall be deemed to have met the standard of conduct required for such indemnification unless the contrary has been established by a final, non-appealable judgment by a court of competent jurisdiction.

Section 9.5. Indemnification Priority.

As between the Corporation and affiliates of the Corporation (other than its direct or indirect subsidiaries) who provide indemnification to the Indemnitees for their service to, or on behalf of, the Corporation (collectively, the “Affiliates Indemnitors”) (i) the Corporation is the indemnitor of first resort with respect to all claims indemnifiable pursuant to Section 9.1 against any such Indemnitee (i.e., the Corporation’s obligations to such Indemnitees are primary and any obligation of any Affiliate Indemnitor to advance expenses or to provide indemnification for the same loss or liability incurred by such Indemnitees is secondary), (ii) the Corporation shall be required to advance the full amount of expenses incurred by any such Indemnitee and shall be liable for the full amount of all liability and loss suffered by such Indemnitee (including, but not limited to, expenses (including, but not limited to, attorneys’ fees and expenses), judgments, fines and amounts paid in settlement and reasonably incurred by such Indemnitee), without regard to any rights any such Indemnitee may have against any Affiliate Indemnitor, and (iii) the Corporation irrevocably waives, relinquishes and releases each Affiliate Indemnitor from any and all claims against such Affiliate Indemnitor for contribution, subrogation or any other recovery of any kind in respect thereof. The Corporation shall indemnify each Affiliate Indemnitor directly for any amounts that such Affiliate Indemnitor pays as indemnification or advancement on behalf of any such Indemnitee and for which such Indemnitee may be entitled to indemnification from the Corporation pursuant to Section 9.1. No advancement or payment by any Affiliate Indemnitor on behalf of any such Indemnitee with respect to any claim for which such Indemnitee has sought indemnification from the Corporation shall affect the foregoing and the Affiliate Indemnitors shall be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Indemnitee against the Corporation.

Phio Pharmaceuticals Corp.
2012 LONG TERM INCENTIVE PLAN

1. DEFINED TERMS

Exhibit A, which is incorporated by reference, defines the terms used in the Plan and sets forth certain operational rules related to those terms.

2. PURPOSE

The Plan has been established to advance the interests of the Company by providing for the grant to Participants of Stock-based incentive Awards and other Awards.

3. ADMINISTRATION

The Administrator has discretionary authority, subject only to the express provisions of the Plan, to interpret the Plan; determine eligibility for and grant Awards; determine, modify or waive the terms and conditions of any Award; prescribe forms, rules and procedures; and otherwise do all things necessary to carry out the purposes of the Plan. Determinations of the Administrator made under the Plan will be conclusive and will bind all parties.

4. LIMITS ON AWARDS UNDER THE PLAN

(a) Number of Shares. The maximum number of shares of Stock that may be delivered upon satisfaction of Equity Awards under the Plan shall be 4,000,000 shares of Stock. Up to the total number of shares of Stock set forth in the preceding sentence may be issued in satisfaction of ISOs, but nothing in this Section 4(a) shall be construed as requiring that any, or any fixed number of, ISOs be awarded under the Plan. The number of shares of Stock delivered in satisfaction of Equity Awards shall, for purposes of this Section 4(a), be determined net of shares of Stock withheld by the Company in payment of the exercise price of the Award or in satisfaction of tax withholding requirements with respect to the Award and, for the avoidance of doubt, without including any shares of Stock underlying Awards settled in cash or which otherwise expire or become unexercisable without having been exercised or are forfeited to or repurchased by the Company due to failure to vest. The limits set forth in this Section 4(a) shall be construed to comply with Section 422. To the extent consistent with the requirements of Section 422 and with other applicable legal requirements (including applicable stock exchange requirements, if any), Stock issued under Substitute Awards shall not reduce the number of shares available for Awards under the Plan. The shares which may be delivered under Substitute Awards shall be in addition to the limitations set forth in this Section 4(a) on the number of shares available for issuance under the Plan.

(b) Type of Shares. Shares of Stock delivered by the Company under the Plan may be authorized but unissued Stock or previously issued Stock acquired by the Company. No fractional shares of Stock will be delivered under the Plan.

(c) Non-Employee Director Limit. The maximum number of shares of Stock subject to Equity Awards granted during a single calendar year to any director of the Company who is not an Employee, taken together with any cash fees paid during the fiscal year to such individual in respect of his or her service as a member of the Board during such year (including service as a member or chair of any committees of the Board), shall not exceed \$250,000 in total value (calculating the value of any such Equity Awards based on the grant date fair value of such Equity Awards for financial reporting purposes).

5. ELIGIBILITY AND PARTICIPATION

The Administrator will select Participants from among those key Employees and directors of, and consultants and advisors to, the Company or its Affiliates who, in the opinion of the Administrator, are in a position to make a significant contribution to the success of the Company and its Affiliates; *provided*, that, subject to such express exceptions, if any, as the Administrator may establish, eligibility for Equity Awards shall be further limited to those persons as to whom the use of a Form S-8 registration statement is permissible. Eligibility for ISOs is limited to employees of the Company or of a "parent corporation" or "subsidiary corporation" of the Company as those terms are defined in Section 424 of the Code. Eligibility for Stock Options other than ISOs is limited to individuals described in the first sentence of this Section 5 who are providing direct services on the date of grant of the Stock Option to the Company or to a subsidiary of the Company that would be described in the first sentence of Treas. Regs. §1.409A-1(b)(5)(iii)(E).

6. RULES APPLICABLE TO AWARDS

(a) In General

(1) Award Provisions. The Administrator will determine the terms of all Awards, subject to the limitations provided herein. By accepting (or, under such rules as the Administrator may prescribe, being deemed to have accepted) an Award, the Participant agrees to the terms of the Award and the Plan. The Administrator will determine whether Equity Awards are settled in shares of Stock or cash or whether the settlement or payment of Awards shall be subject to deferral. Notwithstanding any provision of this Plan to the contrary, Substitute Awards may contain terms and conditions that are inconsistent with the terms and conditions specified herein, as determined by the Administrator.

(2) Term of Plan. No Awards may be made after the tenth anniversary of the date that this Plan is first adopted by the Board of Directors of the Company, but previously granted Awards may continue beyond that date in accordance with their terms.

(3) Transferability. Neither ISOs nor, except as the Administrator otherwise expressly provides in accordance with the second sentence of this Section 6(a)(3), other Awards may be transferred other than by will or by the laws of descent and distribution, and during a Participant's lifetime ISOs (and, except as the Administrator otherwise expressly provides in accordance with the second sentence of this Section 6(a)(3), other Equity Awards requiring exercise) may be exercised only by the Participant. The Administrator may permit Equity Awards other than ISOs to be transferred by gift, subject to applicable securities and other laws and such limitations as the Administrator may impose.

(4) Vesting, Etc. The Administrator shall determine the time or times at which an Equity Award will vest or become exercisable and the terms on which an Equity Award requiring exercise will remain exercisable. Without limiting the foregoing, the Administrator may at any time accelerate the vesting or exercisability of an Equity Award, regardless of any adverse or potentially adverse tax or other consequences resulting from such acceleration. Unless the Administrator expressly provides otherwise, however, the following rules will apply if a Participant's Employment ceases: immediately upon the cessation of the Participant's Employment, each Award requiring exercise that is then held by the Participant or by the Participant's permitted transferees, if any, will cease to be exercisable and will terminate, and all other Awards that are then held by the Participant or by the Participant's permitted transferees, if any, to the extent not already vested will be forfeited, except that:

(A) subject to (B) and (C) below, all Stock Options and SARs held by the Participant or the Participant's permitted transferees, if any, immediately prior to the cessation of the Participant's Employment, to the extent then exercisable, will remain exercisable for the lesser of (i) a period of three months or (ii) the period ending on the latest date on which such Stock Option or SAR could have been exercised without regard to this Section 6(a)(4), and will thereupon terminate;

(B) all Stock Options and SARs held by a Participant or the Participant's permitted transferees, if any, immediately prior to the cessation of Participant's Employment due to death, to the extent then exercisable, will remain exercisable for the lesser of (i) the one year period ending with the first anniversary of the Participant's death or (ii) the period ending on the latest date on which such Stock Option or SAR could have been exercised without regard to this Section 6(a)(4), and will thereupon terminate; and

(C) all Stock Options and SARs held by a Participant or the Participant's permitted transferees, if any, immediately prior to the cessation of the Participant's Employment will immediately terminate upon such cessation if the Administrator in its sole discretion determines that such cessation of Employment has resulted for reasons which cast such discredit on the Participant as to justify immediate termination of the Award or are otherwise determined by the Administrator to constitute cause.

(5) Recovery of Compensation; Other Terms

(A) Awards (whether or not vested or exercisable) held by a Participant are subject to forfeiture, termination and rescission, and a Participant will be obligated to return to the Company the value received with respect to Awards (including payments made and/or Stock delivered under an Award, and any gain realized on a subsequent sale or disposition of an Award or Stock delivered under an Award), in each case (i) to the extent provided by the Administrator in an Award agreement in connection with (A) a breach by the Participant of a non-competition, non-solicitation, confidentiality or similar covenant or agreement or (B) an overpayment to the Participant of incentive compensation due to inaccurate financial data, (ii) in accordance with Company policy relating to the recovery of erroneously-paid incentive compensation, as such policy may be amended and in effect from time to time, or (iii) as otherwise required by law or applicable stock exchange listing standards, including, without limitation, the Dodd-Frank Wall Street Reform and Consumer Protection Act.

(B) Each Participant, by accepting an Award pursuant to the Plan, agrees to return the full amount required under this Section 6(a)(5) at such time and in such manner as the Administrator shall determine in its sole discretion and consistent with applicable law. Neither the Administrator nor the Company will be responsible for any adverse tax or other consequences to a Participant that may arise in connection with this Section 6(a)(5). For the avoidance of doubt, in addition to any forfeiture or other restrictions imposed by the terms of an Award agreement, every Award issued under the Plan will be subject to potential forfeiture or “claw back” to the fullest extent called for by applicable federal or state law. In addition, to the extent provided by the Administrator, Shares received upon settlement, vesting or exercise of an Award may be subject to stock ownership guidelines or policies established by the Company with respect to its employees, directors and/or other service providers.

(6) Taxes. The Administrator will make such provision for the withholding of taxes as it deems necessary. The Administrator may, but need not, hold back shares of Stock from an Award or permit a Participant to tender previously owned shares of Stock in satisfaction of tax withholding requirements (but not in excess of the minimum withholding required by law, or, if and when the Company adopts any applicable accounting standard allowing for greater share withholding, up to such withholding rate that will not cause an adverse accounting consequence or cost and is permitted under applicable tax rules).

(7) Dividend Equivalents, Etc. The Administrator may provide for the payment of amounts (on terms and subject to conditions established by the Administrator) in lieu of cash dividends or other cash distributions with respect to Stock subject to an Equity Award. Any entitlement to dividend equivalents or similar entitlements shall be established and administered either consistent with exemption from, or in compliance with, the requirements of Section 409A. In addition, any amounts payable in respect of Restricted Stock (or any other Award subject to any vesting condition) may be subject to such limits or restrictions or alternative terms as the Administrator may impose.

(8) Rights Limited. Nothing in the Plan will be construed as giving any person the right to be granted an Award or to continued employment or service with the Company or its Affiliates, or any rights as a stockholder except as to shares of Stock actually issued under the Plan. The loss of existing or potential profit in Awards will not constitute an element of damages in the event of termination of Employment for any reason, even if the termination is in violation of an obligation of the Company or any Affiliate to the Participant.

(9) Coordination with Other Plans. Awards under the Plan may be granted in tandem with, or in satisfaction of or substitution for, other Awards under the Plan or awards made under other compensatory plans or programs of the Company or its Affiliates. For example, but without limiting the generality of the foregoing, awards under other compensatory plans or programs of the Company or its Affiliates may be settled in Stock (including, without limitation, Unrestricted Stock) if the Administrator so determines, in which case the shares delivered shall be treated as awarded under the Plan (and shall reduce the number of shares thereafter available under the Plan in accordance with the rules set forth in Section 4).

(10) Section 409A. Each Award shall contain such terms as the Administrator determines, and shall be construed and administered, such that the Award either (i) qualifies for an exemption from the requirements of Section 409A, or (ii) satisfies such requirements.

(11) Fair Market Value. Except as otherwise expressly provided herein, in determining the fair market value of any share of Stock under the Plan, the Administrator shall make the determination in good faith on such basis as it deems appropriate, taking into account the requirements of Section 422 and Section 409A, to the extent applicable; *provided*, that unless otherwise determined by the Administrator, if the Stock is admitted to trading on an established securities exchange, “fair market value” shall be the closing price of a share of Stock on such date (or, if the Stock was not traded on such day, then the next preceding day on which the Stock was traded).

(12) Certain Requirements of Corporate Law. Equity Awards shall be granted and administered consistent with the requirements of applicable Delaware law relating to the issuance of stock and the consideration to be received therefor, and with the applicable requirements of the stock exchanges or other trading systems or national market on which the Stock is listed or entered for trading, in each case as determined by the Administrator.

(b) Awards Requiring Exercise. Equity Awards requiring exercise will be subject to the provisions of this Section 6(b).

(1) Time and Manner of Exercise. Unless the Administrator expressly provides otherwise, an Award requiring exercise by the holder will not be deemed to have been exercised until the Administrator receives a notice of exercise (in form acceptable to the Administrator), which may be an electronic notice, signed (including electronic signature in form acceptable to the Administrator) by the appropriate person and accompanied by any payment required under the Award. If the Award is exercised by any person other than the Participant, the Administrator may require satisfactory evidence that the person exercising the Award has the right to do so.

(2) Exercise Price. The exercise price (or the base value from which appreciation is to be measured) of each Award requiring exercise shall be 100% (in the case of an ISO granted to a ten-percent shareholder within the meaning of subsection (b)(6) of Section 422, 110%) of the fair market value of the Stock (as provided in Section 6(a)(12)) subject to the Award, determined as of the date of grant, or such higher amount as the Administrator may determine in connection with the grant or as otherwise determined by the Administrator with respect to a Substitute Award.

(3) Payment of Exercise Price. Where the exercise of an Award is to be accompanied by payment, payment of the exercise price shall be by cash or check acceptable to the Administrator, or, if so permitted by the Administrator and if legally permissible, (i) through the delivery of unrestricted shares of Stock that have a fair market value equal to the exercise price, subject to such holding requirements, if any, as the Administrator may prescribe, (ii) through a broker-assisted exercise program acceptable to the Administrator, (iii) through the withholding of shares of Stock otherwise to be delivered upon exercise of the Award whose fair market value is equal to the aggregate exercise price of the Award being exercised, (iv) by other means acceptable to the Administrator, or (v) by any combination of the foregoing permissible forms of payment. The delivery of shares in payment of the exercise price under clause (i) above may be accomplished either by actual delivery or by constructive delivery through attestation of ownership, subject to such rules as the Administrator may prescribe.

(4) Maximum Term. Awards requiring exercise will have a maximum term not to exceed ten (10) years from the date of grant (or five (5) years from the date of grant in the case of an ISO granted to a ten-percent shareholder described in Section 6(b)(2) above); *provided*, that if an Award requiring exercise (other than an ISO) would otherwise expire as a result of expiration of the maximum term of such Award (i.e., ten (10) years from the date of grant or such shorter time period as set forth in an Award agreement), and at such time the Participant holding such Award is prohibited by applicable law or written Company policy applicable to similarly situated employees from engaging in any open-market sales of Stock, the maximum term of such Award will automatically extend to thirty (30) days following the date the Participant is no longer prohibited from engaging in such open-market sales.

(c) Cash Awards

(1) A Participant who is granted a Cash Award shall be entitled to a payment, if any, under the Award only if all conditions to payment have been satisfied in accordance with the Plan and the terms of the Award. The Administrator will determine the actual payment, if any, under each Cash Award. The Administrator may, in its sole and absolute discretion, after determining the amount that would otherwise be payable for a Performance Period with respect to a Cash Award that is a Performance Award, adjust (including to zero) the payment, if any, to be made under such Award.

(2) The Administrator shall determine the payment dates for Cash Awards under the Plan. Except as otherwise determined by the Administrator, no payment shall be made under a Cash Award unless the Participant's Employment continues through the date such Cash Award is paid. Payments hereunder are intended to fall under the short-term deferral exception to Section 409A and shall be construed and administered accordingly. Notwithstanding the foregoing, (i) if the documentation establishing the Cash Award provides a specified and objectively determinable payment date or schedule that satisfies the requirements of Section 409A, payment under an Award may be made in accordance with such date or schedule, and (ii) the Administrator may, but need not, permit a Participant to defer payment of a Cash Award beyond the date that the Award would otherwise be payable, *provided*, that any such deferral shall be made in accordance with and subject to the applicable requirements of Section 409A.

7. EFFECT OF CERTAIN TRANSACTIONS

(a) Mergers, Etc. Except as otherwise provided in an Award, the Administrator shall, in its sole discretion, determine the effect of a Covered Transaction on Awards, which determination may include, but is not limited to, the following actions:

(1) Assumption or Substitution. If the Covered Transaction is one in which there is an acquiring or surviving entity, the Administrator may provide for the assumption or continuation of some or all outstanding Awards or for the grant of new awards in substitution thereof by the acquiror or survivor or an affiliate of the acquiror or survivor.

(2) Cash-Out of Awards. If the Covered Transaction is one in which holders of Stock will receive upon consummation a payment (whether cash, non-cash or a combination of the foregoing), then subject to Section 7(a)(5) below the Administrator may provide for payment (a “cash-out”), with respect to some or all Awards or any portion thereof, equal in the case of each affected Equity Award or portion thereof to the excess, if any, of (A) the fair market value of one share of Stock times the number of shares of Stock subject to the Award or such portion, over (B) the aggregate exercise or purchase price, if any, under the Award or such portion (in the case of an SAR, the aggregate base value above which appreciation is measured), in each case on such payment terms (which need not be the same as the terms of payment to holders of Stock) and other terms, and subject to such conditions, as the Administrator determines; *provided*, that the Administrator shall not exercise its discretion under this Section 7(a)(2) with respect to an Award or portion thereof providing for “nonqualified deferred compensation” subject to Section 409A in a manner that would constitute an extension or acceleration of, or other change in, payment terms if such change would be inconsistent with the applicable requirements of Section 409A.

(3) Acceleration of Certain Awards. If the Covered Transaction (whether or not there is an acquiring or surviving entity) is one in which there is no assumption, continuation, substitution or cash-out, then subject to Section 7(a)(5) below, the Administrator may provide that each Equity Award requiring exercise will become fully exercisable, and the delivery of any shares of Stock remaining deliverable under each outstanding Award of Stock Units (including Restricted Stock Units and Performance Awards to the extent consisting of Stock Units) will be accelerated and such shares will be delivered, prior to the Covered Transaction, in each case on a basis that gives the holder of the Award a reasonable opportunity, as determined by the Administrator, following exercise of the Award or the delivery of the shares, as the case may be, to participate as a stockholder in the Covered Transaction; *provided*, that to the extent acceleration pursuant to this Section 7(a)(3) of an Award subject to Section 409A would cause the Award to fail to satisfy the requirements of Section 409A, the Award shall not be accelerated and the Administrator in lieu thereof shall take such steps as are necessary to ensure that payment of the Award is made in a medium other than Stock and on terms that as nearly as possible, but taking into account adjustments required or permitted by this Section 7, replicate the prior terms of the Award.

(4) Termination of Awards Upon Consummation of Covered Transaction Each Award will terminate upon consummation of the Covered Transaction, other than the following: (i) Awards assumed pursuant to Section 7(a)(1) above; (ii) Awards converted pursuant to the proviso in Section 7(a)(3) above into an ongoing right to receive payment other than Stock; (iii) outstanding shares of Restricted Stock (which shall be treated in the same manner as other shares of Stock, subject to Section 7(a)(5) below); and (iv) Cash Awards that by their terms, or as a result of action taken by the Administrator, continue following such Covered Transaction.

(5) Additional Limitations. Any share of Stock and any cash or other property delivered pursuant to Section 7(a)(2) or Section 7(a)(3) above with respect to an Equity Award may, in the discretion of the Administrator, contain such restrictions, if any, as the Administrator deems appropriate to reflect any performance or other vesting conditions to which the Award was subject and that did not lapse (and were not satisfied) in connection with the Covered Transaction. For purposes of the immediately preceding sentence, a cash out under Section 7(a)(2) above or the acceleration of exercisability of an Award under Section 7(a)(3) above shall not, in and of itself, be treated as the lapsing (or satisfaction) of a performance or other vesting condition. In the case of Restricted Stock that does not vest in connection with the Covered Transaction, the Administrator may require that any amounts delivered, exchanged or otherwise paid in respect of such Stock in connection with the Covered Transaction be placed in escrow or otherwise made subject to such restrictions as the Administrator deems appropriate to carry out the intent of the Plan.

(b) Changes in and Distributions With Respect to Stock

(1) Basic Adjustment Provisions. In the event of a stock dividend, stock split or combination of shares (including a reverse stock split), recapitalization or other change in the Company's capital structure that constitutes an equity restructuring within the meaning of FASB ASC Topic 718, the Administrator shall make appropriate adjustments to the maximum number of shares specified in Section 4(a) that may be delivered under the Plan and shall also make appropriate adjustments to the number and kind of shares of stock or securities subject to Equity Awards then outstanding or subsequently granted, any exercise prices relating to Equity Awards and any other provision of Awards affected by such change.

(2) Certain Other Adjustments. The Administrator may also make adjustments of the type described in Section 7(b)(1) above to take into account distributions to stockholders other than those provided for in Section 7(a) and 7(b)(1), or any other event, if the Administrator determines that adjustments are appropriate to avoid distortion in the operation of the Plan and to preserve the value of Awards made hereunder, having due regard for the qualification of ISOs under Section 422 and the requirements of Section 409A, to the extent applicable.

(3) Continuing Application of Plan Terms. References in the Plan to shares of Stock will be construed to include any stock or securities resulting from an adjustment pursuant to this Section 7.

8. LEGAL CONDITIONS ON DELIVERY OF STOCK

The Company will not be obligated to deliver any shares of Stock pursuant to the Plan or to remove any restriction from shares of Stock previously delivered under the Plan until: (i) the Company is satisfied that all legal matters in connection with the issuance and delivery of such shares have been addressed and resolved; (ii) if the outstanding Stock is at the time of delivery listed on any stock exchange or national market system, the shares to be delivered have been listed or authorized to be listed on such exchange or system upon official notice of issuance; and (iii) all conditions of the Award have been satisfied or waived. The Company may require, as a condition to exercise of the Award or delivery of shares of Stock under an Award, such representations or agreements as counsel for the Company may consider appropriate to avoid violation of such the Securities Act of 1933, as amended, or any applicable state or non-U.S. securities law. Any Stock required to be issued to Participants under the Plan will be evidenced in such manner as the Administrator may deem appropriate, including book-entry registration or delivery of stock certificates. In the event that the Administrator determines that stock certificates will be issued to Participants under the Plan, the Administrator may require that certificates evidencing Stock issued under the Plan bear an appropriate legend reflecting any restriction on transfer applicable to such Stock, and the Company may hold the certificates pending lapse of the applicable restrictions.

9. AMENDMENT AND TERMINATION

The Administrator may at any time or times amend the Plan or any outstanding Award for any purpose which may at the time be permitted by law, and may at any time terminate the Plan as to any future grants of Awards; provided, that except as otherwise expressly provided in the Plan the Administrator may not, without the Participant's consent, alter the terms of an Award so as to affect materially and adversely the Participant's rights under the Award, unless the Administrator expressly reserved the right to do so at the time of the Award. Any amendments to the Plan shall be conditioned upon stockholder approval only to the extent, if any, such approval is required by law (including the Code and applicable stock exchange requirements), as determined by the Administrator. For the avoidance of doubt, no amendment to the Plan shall be effective unless approved by stockholders, to the extent stockholder approval is required under the rules of the applicable stock exchange on which the Stock is admitted to trading, if it would reduce the exercise price of any Stock Option previously granted hereunder or otherwise constitute a repricing and, without the receipt of such approval (to the extent so required), the Administrator shall not approve a repurchase by the Company for cash or other property of Stock Options or SARs for which the exercise price or base price, as applicable, exceeds the fair market value of a share of Stock as of the date of such repurchase. For avoidance of doubt, any amendments to the Plan will not modify any Awards granted under the Plan prior to June 5, 2018 to the extent such modification would result in a loss of deductibility under Section 162(m).

10. OTHER COMPENSATION ARRANGEMENTS

The existence of the Plan or the grant of any Award will not in any way affect the Company's right to award a person bonuses or other compensation in addition to Awards under the Plan.

11. MISCELLANEOUS

(a) Waiver of Jury Trial. By accepting an Award under the Plan, each Participant waives any right to a trial by jury in any action, proceeding or counterclaim concerning any rights under the Plan and any Award, or under any amendment, waiver, consent, instrument, document or other agreement delivered or which in the future may be delivered in connection therewith, and agrees that any such action, proceedings or counterclaim shall be tried before a court and not before a jury. By accepting an Award under the Plan, each Participant certifies that no officer, representative, or attorney of the Company has represented, expressly or otherwise, that the Company would not, in the event of any action, proceeding or counterclaim, seek to enforce the foregoing waivers.

(b) Limitation of Liability. Notwithstanding anything to the contrary in the Plan, neither the Company, nor any Affiliate, nor the Administrator, nor any person acting on behalf of the Company, any Affiliate, or the Administrator, shall be liable to any Participant or to the estate or beneficiary of any Participant or to any other holder of an Award by reason of any acceleration of income, or any additional tax (including any interest and penalties), asserted by reason of the failure of an Award to satisfy the requirements of Section 422 or Section 409A or by reason of Section 4999 of the Code, or otherwise asserted with respect to the Award; *provided*, that nothing in this Section 11(b) shall limit the ability of the Administrator or the Company, in its discretion, to provide by separate express written agreement with a Participant for a gross-up payment or other payment in connection with any such acceleration of income or additional tax.

12. ESTABLISHMENT OF SUB-PLANS

The Board may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable blue sky, securities or tax laws of various jurisdictions. The Board will establish such sub-plans by adopting supplements to the Plan setting forth (i) such limitations on the Administrator's discretion under the Plan as the Board deems necessary or desirable and (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board deems necessary or desirable. All supplements adopted by the Board will be deemed to be part of the Plan, but each supplement will apply only to Participants within the affected jurisdiction and the Company will not be required to provide copies of any supplement to Participants in any jurisdiction that is not affected.

13. GOVERNING LAW

Except as otherwise provided by the express terms of an Award agreement or under a sub-plan described in Section 12, the provisions of the Plan and of Awards under the Plan and all claims or disputes arising out of or based upon the Plan or any Award under the Plan or relating to the subject matter hereof or thereof will be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the domestic substantive laws of the State of Delaware without giving effect to any choice or conflict of laws provision or rule that would cause the application of the domestic substantive laws of any other jurisdiction.

EXHIBIT A

Definition of Terms

The following terms, when used in the Plan, will have the meanings and be subject to the provisions set forth below:

“Administrator”: The Compensation Committee, except that the Compensation Committee may delegate (i) to one or more of its members (or one or more other members of the Board, including the full Board) such of its duties, powers and responsibilities as it may determine; (ii) to one or more officers of the Company the power to grant Awards to the extent permitted by Section 157(c) of the Delaware General Corporation Law; and (iii) to such Employees or other persons as it determines such ministerial tasks as it deems appropriate.

“Affiliate”: Any corporation or other entity that stands in a relationship to the Company that would result in the Company and such corporation or other entity being treated as one employer under Section 414(b) and Section 414(c) of the Code, except that in determining eligibility for the grant of a Stock Option or SAR by reason of service for an Affiliate, Sections 414(b) and 414(c) of the Code shall be applied by substituting “at least 50%” for “at least 80%” under Section 1563(a)(1), (2) and (3) of the Code and Treas. Regs. § 1.414(c)-2; *provided*, that to the extent permitted under Section 409A, “at least 20%” shall be used in lieu of “at least 50%”; *and further provided*, that the lower ownership threshold described in this definition (50% or 20% as the case may be) shall apply only if the same definition of affiliation is used consistently with respect to all compensatory stock options or stock awards (whether under the Plan or another plan). The Company may at any time by amendment provide that different ownership thresholds (consistent with Section 409A) apply but any such change shall not be effective for twelve (12) months.

“Award”: Any or a combination of the following, any of which may be, in the discretion of the Administrator, a Performance Award:

(i) Stock Options.

(ii) SARs.

(iii) Restricted Stock.

(iv) Unrestricted Stock.

(v) Stock Units, including Restricted Stock Units.

(vi) Cash Awards.

(vii) Awards (other than Awards described in (i) through (vi) above) that are convertible into or otherwise based on Stock.

“Board”: The Board of Directors of the Company; *provided*, however, that if the Company is a direct or indirect subsidiary of a publicly held corporation, it shall mean the Board of Directors of the publicly held corporation.

“Cash Award”: An Award denominated in cash.

“Code”: The U.S. Internal Revenue Code of 1986 as from time to time amended and in effect, or any successor statute as from time to time in effect.

“Compensation Committee”: In the event that the Company is a direct or indirect subsidiary of a publicly held corporation, the Compensation Committee shall mean the Compensation Committee of the Board of the publicly held corporation; otherwise, Compensation Committee shall mean the Compensation Committee of the Board.

“Company”: Phio Pharmaceuticals Corp.

“Covered Transaction”: Any of (i) a consolidation, merger, or similar transaction or series of related transactions, including a sale or other disposition of stock, in which the Company is not the surviving corporation or which results in the acquisition of all or substantially all of the Company’s then outstanding common stock by a single person or entity or by a group of persons and/or entities acting in concert, (ii) a sale or transfer of all or substantially all the Company’s assets, or (iii) a dissolution or liquidation of the Company. Where a Covered Transaction involves a tender offer that is reasonably expected to be followed by a merger described in clause (i) (as determined by the Administrator), the Covered Transaction shall be deemed to have occurred upon consummation of the tender offer.

“Employee”: Any person who is employed by the Company or an Affiliate.

“Employment”: A Participant’s employment or other service relationship with the Company and its Affiliates. Employment will be deemed to continue, unless the Administrator expressly provides otherwise, so long as the Participant is employed by, or otherwise is providing services in a capacity described in Section 5 to the Company or its Affiliates. If a Participant’s employment or other service relationship is with an Affiliate and that entity ceases to be an Affiliate, the Participant’s Employment will be deemed to have terminated when the entity ceases to be an Affiliate unless the Participant transfers Employment to the Company or its remaining Affiliates. Notwithstanding the foregoing and the definition of “Affiliate” above, in construing the provisions of any Award relating to the payment of “nonqualified deferred compensation” (subject to Section 409A) upon a termination or cessation of Employment, references to termination or cessation of employment, separation from service, retirement or similar or correlative terms shall be construed to require a “separation from service” (as that term is defined in Section 1.409A-1(h) of the Treasury Regulations) from the Company and from all other corporations and trades or businesses, if any, that would be treated as a single “service recipient” with the Company under Section 1.409A-1(h)(3) of the Treasury Regulations. The Company may, but need not, elect in writing, subject to the applicable limitations under Section 409A, any of the special elective rules prescribed in Section 1.409A-1(h) of the Treasury Regulations for purposes of determining whether a “separation from service” has occurred. Any such written election shall be deemed a part of the Plan.

“Equity Award”: Awards other than Cash Awards.

“ISO”: A Stock Option intended to be an “incentive stock option” within the meaning of Section 422. Each option granted pursuant to the Plan will be treated as providing by its terms that it is to be a non-incentive stock option unless, as of the date of grant, it is expressly designated as an ISO.

“Participant”: A person who is granted an Award under the Plan.

“Performance Award”: An Award subject to Performance Criteria.

“Performance Criteria”: For a Performance Period, specified criteria, other than the mere continuation of Employment or the mere passage of time, the satisfaction of which is a condition for the grant, exercisability, vesting or full enjoyment of an Award. Performance Criteria may include an objectively determinable measure of performance relating to any or any combination of the following (measured either absolutely or by reference to an index or indices or on an individual basis and determined either on a consolidated basis or, as the context permits, on a divisional, subsidiary, line of business, project or geographical basis or in combinations thereof): sales; revenues; assets; expenses; earnings before or after deduction for all or any portion of interest, taxes, depreciation, or amortization, whether or not on a continuing operations or an aggregate or per share basis; return on equity, investment, capital or assets; one or more operating ratios; borrowing levels, leverage ratios or credit rating; market share; capital expenditures; cash flow; stock price; stockholder return; sales of particular products or services; customer acquisition or retention; acquisitions and divestitures (in whole or in part); joint ventures and strategic alliances; spin-offs, split-ups and the like; reorganizations; or recapitalizations, restructurings, financings (issuance of debt or equity) or refinancings; and any other objective or subjective measure or metric as the Administrator deems appropriate. A Performance Criterion and any targets with respect thereto determined by the Administrator need not be based upon an increase, a positive or improved result or avoidance of loss. The Administrator may establish that in the case of any Award intended to qualify for such exception that one or more of the Performance Criteria applicable to such Award will be adjusted to reflect events (for example, the impact of charges for restructurings, discontinued operations, mergers, acquisitions, extraordinary items, and other unusual, infrequently occurring or non-recurring items, the cumulative effects of tax or accounting changes and any other inclusions or exclusions as the Administrator may determine) occurring during the Performance Period that affect the applicable Performance Criterion or Criteria.

“Performance Period”: A period of time, as the may Administrator may select in its discretion, over which the attainment of one or more Performance Criteria will be measured for the purpose of determining a grantee’s right to and the vesting and/or payment of an Award. Performance Periods may be of varying length and of overlapping durations as determined by the Administrator.

“Plan”: The Phio Pharmaceuticals Corp. 2012 Long Term Incentive Plan as from time to time amended and in effect.

“Restricted Stock”: Stock subject to restrictions requiring that it be redelivered or offered for sale to the Company if specified conditions are not satisfied.

“Restricted Stock Unit”: A Stock Unit that is, or as to which the delivery of Stock or cash in lieu of Stock is, subject to the satisfaction of specified performance or other vesting conditions.

“SAR”: A right entitling the holder upon exercise to receive an amount (payable in cash or in shares of Stock of equivalent value) equal to the excess of the fair market value (as defined in Section 6(b)) of the shares of Stock subject to the right over the base value from which appreciation under the SAR is to be measured.

“Section 409A”: Section 409A of the Code.

“Section 422”: Section 422 of the Code.

“Section 162(m)”: Section 162(m) of the Code.

“Stock”: Common stock of the Company, par value \$0.0001 per share.

“Stock Option”: An option entitling the holder to acquire shares of Stock upon payment of the exercise price.

“Stock Unit”: An unfunded and unsecured promise, denominated in shares of Stock, to deliver Stock or cash measured by the value of Stock in the future.

Substitute Awards: Awards that are the result of converting, replacing, or adjusting equity awards of an acquired company in connection with the acquisition.

“Unrestricted Stock”: Stock not subject to any restrictions under the terms of the Award.

Exhibit 31.1

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Gerrit Dispersyn, 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. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, 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 my 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 that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of 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: November 12, 2019

/s/ Gerrit Dispersyn

Gerrit Dispersyn, Dr. Med. Sc.
President and Chief Executive Officer
(as Principal Executive and Financial Officer)

Exhibit 32.1

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

In connection with the Quarterly Report on Form 10-Q of Phio Pharmaceuticals Corp. (the "Company") for the period ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officer of the Company certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to his 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 result of operations.

/s/ Gerrit Dispersyn

Gerrit Dispersyn, Dr. Med. Sc.
President and Chief Executive Officer
(as Principal Executive and Financial Officer)

November 12, 2019

