UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-Q

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

For the quarterly period ended December 31, 2023

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT

For the transition period from N/A to N/A

Commission File Number: **000-54986**

ARCH THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Nevada	**46-0524102**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
235 Walnut Street, Suite 6 **Framingham, MA**	**01702**
(Address of principal executive offices)	(Zip Code)

(617) 431-2313
Registrant's telephone number, including area code

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
N|A	N|A	N|A

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act

Large accelerated filer ☐
Non-accelerated filer ☒
Emerging growth company ☐

Accelerated filer ☐
Smaller reporting company ☒

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

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

As of February 20, 2024, 4,742,364 shares of the registrant's common stock were outstanding.

ARCH THERAPEUTICS, INC.
Quarterly Report on Form 10-Q

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Arch Therapeutics, Inc. and Subsidiary
Condensed Consolidated Balance Sheets
As of December 31, 2023 (Unaudited) and September 30, 2023

	December 31, 2023	September 30, 2023
ASSETS	(unaudited)	
Current assets:		
Cash	$ 205,850	$ 222,720
Inventory	1,335,849	1,364,504
Prepaid expenses and other current assets	272,799	362,866
Total current assets	1,814,498	1,950,090
Long-term assets:		
Property and equipment, net	3,949	4,599
Other assets	3,500	3,500
Total long-term assets	7,449	8,099
Total assets	$ 1,821,947	$ 1,958,189
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 2,772,424	$ 2,304,207
Shareholders and third-party advances related to bridge financing	950,000	-
Accrued expenses and other liabilities	486,062	467,496
Insurance premium financing	139,020	243,285
Convertible notes payable, senior secured, current portion, net of discount	4,183,035	3,519,103
Convertible notes payable, unsecured, current portion, net of discount	2,010,338	1,658,702
Convertible notes payable, Series 2, unsecured, current portion	-	450,000
Accrued interest, current portion	856,584	823,128
Total current liabilities	11,397,463	9,465,921
Commitments and contingencies		
Stockholders' deficit:		
Preferred stock, $0.001 par value, 5,000,000 shares authorized, none issued and outstanding as of December 31, 2023 and September 30, 2023	-	-
Common stock, $0.001 par value, 350,000,000 authorized as of December 31, 2023 and September 30, 2023, 4,742,364 and 4,689,446 shares issued and outstanding as of December 31, 2023 and September 30, 2023	4,742	4,689
Additional paid-in capital	55,157,003	54,543,188
Accumulated deficit	(64,737,261)	(62,055,609)
Total stockholders' deficit	(9,575,516)	(7,507,732)
Total liabilities and stockholders' deficit	$ 1,821,947	$ 1,958,189

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

Arch Therapeutics, Inc. and Subsidiary
Condensed Consolidated Statements of Operations (Unaudited)
For the Three Months Ended December 31, 2023 and 2022

	For the three months ended	
	December 31, 2023	December 31, 2022
Revenue	$ 45,867	$ 6,261
Operating expenses:		
Cost of revenues	23,606	17,635
Selling, general and administrative expenses	1,311,350	1,102,916
Research and development expenses	205,580	161,453
Total operating expenses	1,540,536	1,282,004
Loss from operations	(1,494,669)	(1,275,743)
Other (expense) :		
Interest expense	(1,186,983)	(524,313)
Net loss	$ (2,681,652)	$ (1,800,056)
Loss per share - basic and diluted		
Net loss per common share - basic and diluted	$ (0.57)	$ (1.44)
Weighted common shares - basic and diluted	4,707,473	1,249,432

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

Arch Therapeutics, Inc. and Subsidiary
Condensed Consolidated Statements of Changes in Stockholders' Deficit (Unaudited)
For the Three Months Ended December 31, 2023 and 2022

	Preferred Stock Shares	Amount	Common Stock Shares	Amount	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
Balance at September 30, 2023	-	$ -	4,689,446	$ 4,689	$ 54,543,188	$ (62,055,609)	$ (7,507,732)
Net loss	-	-	-	-	-	(2,681,652)	(2,681,652)
Issuance of common stock upon conversion of convertible notes	-	-	52,918	53	587,906	-	587,959
Stock-based compensation expense	-	-	-	-	25,909	-	25,909
Balance at December 31, 2023	-	$ -	4,742,364	$ 4,742	$ 55,157,003	$ (64,737,261)	$ (9,575,516)
Balance at September 30, 2022	-	$ -	1,249,432	$ 1,249	$ 50,878,718	$ (55,072,773)	$ (4,192,806)
Net loss	-	-	-	-	-	(1,800,056)	(1,800,056)
Stock-based compensation expense	-	-	-	-	104,026	-	104,026
Balance at December 31, 2022	-	$ -	1,249,432	$ 1,249	$ 50,982,744	$ (56,872,829)	$ (5,888,836)

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

Arch Therapeutics, Inc. and Subsidiary
Condensed Consolidated Statements of Cash Flows (Unaudited)
For the Three Months Ended December 31, 2023 and 2022

	For the Three Months Ended	
	December 31, 2023	**December 31, 2022**
Cash flows from operating activities:		
Net loss	$ (2,681,652)	$ (1,800,056)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation	650	663
Stock-based compensation	25,909	104,026
Accretion of discount and debt issuance costs on convertible notes payable	1,015,568	371,755
Changes in operating assets and liabilities:		
Inventory	28,655	3,211
Prepaid expenses and other current assets	90,067	147,492
Accounts payable	468,217	433,482
Accrued interest	171,414	152,558
Accrued expenses and other liabilities	18,567	(63,196)
Net cash used in operating activities	(862,605)	(650,065)
Cash flows from financing activities:		
Repayment of insurance premium financing	(104,265)	(106,257)
Proceeds from shareholders and third-party advances related to bridge financing	950,000	-
Proceeds from issued common stock and warrants, net of financing costs	-	20,000
Net cash provided by (used in) financing activities	845,735	(86,257)
Net decrease in cash	(16,870)	(736,322)
Cash, beginning of period	222,720	746,940
Cash, end of period	$ 205,850	$ 10,618
Non-cash financing activities:		
Conversion of Series 2 convertible notes and accrued interest into common stock	$ 587,959	$ -

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

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Arch Therapeutics, Inc. (together with its subsidiary, the "Company" or "Arch") is a biotechnology company developing and marketing a product based on our innovative AC5® self-assembling technology platform. The Company believes that its products can be important advances in the field of stasis and barrier applications, which includes managing wounds created during surgery, trauma or interventional care, or from disease; stopping bleeding (hemostasis); and controlling leaking (sealant).

Basis of presentation

The accompanying unaudited condensed consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and the applicable rules and regulations of the Securities and Exchange Commission (the "SEC") regarding interim financial reporting. Certain information and note disclosures normally included in the financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to such rules and regulations. We believe that the disclosures contained in these condensed financial statements are adequate to make the information presented herein not misleading. These condensed financial statements should be read in conjunction with the financial statements contained in the Company's Annual Report on Form 10-K for the year ended September 30, 2023, filed with the SEC. The accompanying condensed financial statements are unaudited, but in the opinion of management contain all adjustments, including normal recurring adjustments, necessary to present fairly the Company's financial position as of Dec ember 31, 2023, and the results of its operations and its cash flows for the three months ended December 31, 2023 and 2022. The balance sheet as of September 30, 2023 is derived from the Company's audited financial statements. The results of operations for the three months ended December 31, 2023 are not necessarily indicative of the results of operations to be expected for the full fiscal year ending September 30, 2024.

In accordance with the "Segment Reporting" Topic of the Accounting Standards Codification, the Company's chief operating decision maker (the Company's President and Chief Executive Officer) determined that the Company has only one reporting unit.

The condensed consolidated financial statements include the accounts of Arch Therapeutics, Inc. and its wholly owned subsidiary, Arch Biosurgery, Inc., a biotechnology company. All intercompany accounts and transactions have been eliminated in consolidation.

Going Concern

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The Company has not yet generated sufficient revenues to fund operations and relies on issuance of debt and equity instruments to generate working capital. As reflected in the accompanying financial statements, for the three months ended December 31, 2023, the Company recorded a net loss of $2,681,652 and used cash in operations of $862,605. These factors raise substantial doubt about the Company's ability to continue as a going concern within one year of the date that the financial statements are issued. The financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

The Company expects to incur substantial expenses for the foreseeable future relating to research, development and commercialization of its potential future products. The Company has not yet generated sufficient revenues to fund operations and relies on issuance of debt and equity instruments to generate working capital. In evaluating the going concern position of the Company, management has considered potential funding providers and believes that financing to fund future operations could be provided by equity and/or debt financing. Even if the Company is able to obtain additional financing, it may contain undue restrictions on our operations, in the case of debt financing, or cause substantial dilution for our stockholders, in the case of equity financing.

Reverse stock split

On January 6, 2023, the directors of the Company authorized a reverse share split of the issued and outstanding Common Shares in a ratio of 1200, effective January 17, 2023. Accordingly, all share and per share amounts presented herein with respect to common stock have been retroactively adjusted to reflect the above-described reverse stock split for all periods presented.

Use of Estimates

Management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenue and expense during the reporting periods. Significant estimates include the assumptions used in the accrual for potential liabilities, the net realizable value of inventory, the valuation of debt and equity instruments, the fair value of derivative liabilities, valuation of equity instruments issued for services, and deferred tax valuation allowances. Actual results could differ from those estimates.

Revenue

The Company recognizes revenue in accordance with Accounting Standards Codification (ASC) 606, *Revenue from Contracts with Customers* ("ASC 606"), through a five-step process: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) a performance obligation is satisfied.

The Company's source of revenue is product sales. Contracts with customers contain a single performance obligation and the Company recognizes revenue from product sales when the Company has satisfied our performance obligation by transferring control of the product to the customers. Control of the product transfers to the customer upon shipment from the Company's third-party warehouse. In circumstances where the transaction price is not able to be determined at the time of shipment, the Company does not recognize revenue or any receivable amount until such time that the final transaction price is established.

Cost of Revenue

Cost of revenue includes product costs, warehousing, overhead allocation and royalty expense.

Research and Development

The Company expenses internal and external research and development costs, including costs of funded research and development arrangements, in the period incurred.

Accounting for Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with the guidance of FASB ASC Topic 718, *Compensation-Stock Compensation* ("*ASC 718*"), which requires all share-based payments be recognized in the condensed consolidated financial statements based on their fair values. In accordance with ASC 718, the Company has elected to use the Black-Scholes Option Pricing Model (the "*Black-Scholes Model*") to determine the fair value of options granted and recognizes the compensation cost of share-based awards on a straight-line basis over the vesting period of the award.

The determination of the fair value of share-based payment awards utilizing the Black-Scholes model is affected by the fair value of the Common Stock and a number of other assumptions, including expected volatility, expected life, risk-free interest rate and expected dividends. The expected life for awards uses the simplified method for all "plain vanilla" options, as defined in ASC 718-10-S99, and the contractual term for all other employee and non-employee awards. The risk-free interest rate assumption is based on observed interest rates appropriate for the terms of the Company's awards. The dividend yield assumption is based on history and the expectation of paying no dividends. Stock-based compensation expense, when recognized in the condensed consolidated financial statements, is based on awards that are ultimately expected to vest.

Fair Value Measurements

The Company measures both financial and nonfinancial assets and liabilities in accordance with FASB ASC Topic 820,*Fair Value Measurements and Disclosures*, including those that are recognized or disclosed in the condensed consolidated financial statements at fair value on a recurring basis. The standard created a fair value hierarchy which prioritizes the inputs to valuation techniques used to measure fair value into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and Level 3 inputs are unobservable inputs that reflect the Company's own views about the assumptions market participants would use in pricing the asset or liability.

At December 31, 2023 and September 30, 2023, the carrying amounts of cash, accounts payables and accrued expense and other liabilities approximate fair value because of their short-term nature. The carrying amounts for the Series Convertible Notes (See Note 10), 2022 Notes (see Note 8), and Second Notes (see Note 9), and Third Notes (see Note 9) approximate fair value because borrowing rates and terms are similar to comparable market participants.

Warrants

The Company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in Accounting Standards Codification ("ASC") 480, Distinguishing Liabilities from Equity ("ASC 480"), and ASC 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company's own common stock and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted when the warrants are issued and at the end each subsequent quarterly period while the warrants are outstanding. For issued or modified warrants that meet all of the criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants that do not meet all the criteria for equity classification, the warrants are required to be liability classified and recorded at their initial fair value on the date of issuance and remeasured at fair value at each balance sheet date thereafter. Changes in the estimated fair value of the warrants are recognized as a non-cash gain or loss on the statements of operations. The Company has determined that the warrants issued in June 2018 and May 2019 equity financing (see Note 3) meet the requirements for liability classification.

Loss per Common Share

Basic earnings (loss) per share is computed by dividing the net income (loss) applicable to common stockholders by the weighted average number of shares of common stock outstanding during the year, excluding shares of unvested restricted common stock. Shares of restricted stock are included in the basic weighted average number of common shares outstanding from the time they vest. Diluted earnings (loss) per share is computed by dividing the net income applicable to common stockholders by the weighted average number of common shares outstanding plus the number of additional common shares that would have been outstanding if all dilutive potential common shares had been issued, using the treasury stock method. Shares of restricted stock are included in the diluted weighted average number of common shares outstanding from the date they are granted. Potential common shares are excluded from the computation when their effect is antidilutive.

For the periods ended December 31, 2023 and 2022, the calculations of basic and diluted loss per share are the same because potential dilutive securities would have had an anti-dilutive effect. The potentially dilutive securities consisted of the following:

	December 31, 2023	December 31, 2022
Stock Options	100,300	104,325
Stock Warrants	26,284,002	789,577
Convertible notes payable	771,340	652,202
Unvested restricted common stock	-	250
Total	27,155,642	1,546,354

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash. The Company maintains its cash in bank deposits accounts, which, at times, may exceed federally insured limits. The Company has not experienced any losses in such accounts. The Company believes it is not exposed to any significant credit risk on cash.

Risks and uncertainties – Geopolitical Conflicts

The Company sources its materials and services for its products and product candidates from facilities in areas impacted or which may be impacted by the outbreak of geopolitical conflicts. The Company's ability to obtain future inventory may be impacted, therefore potentially affecting the Company's future revenue stream. In addition, the Company has historically and principally funded its operations through debt borrowings, the issuance of convertible debt, and the issuance of units consisting of Common Stock and warrants which may also be impacted by economic conditions beyond the Company's control as well as uncertainties resulting from geopolitical conflicts. The extent to which recent events, including COVID-19 and the recent war in Ukraine, will impact the global economy and the Company is uncertain and cannot be reasonably measured.

2. INVENTORIES

Inventories consist of the following:

	December 31, 2023	September 30, 2023
Finished Goods	$ 13,971	$ 40,969
Goods-in-Process	1,321,878	1,323,535
Total	$ 1,335,849	$ 1,364,504

Inventories are stated at the lower of cost or net realizable value, with cost determined on a first-in, first-out ("FIFO") basis. The cost of inventories comprises expenditures incurred in acquiring the inventories, the cost of conversion and other costs incurred in bringing them to their existing location and condition. The Company records adjustments to its inventory for estimated obsolescence or diminution in net realizable value equal to the difference between the cost of the inventory and the estimated net realizable value. When evidence exists that the net realizable value of inventory is lower than its cost, the difference is recognized as a loss in the period in which it occurs. Once inventory has been written down, it creates a new cost basis for inventory that may not subsequently written up. For the periods ended December 31, 2023 and 2022, the Company did not record any write-down of inventories.

3. WARRANT DERIVATIVE LIABILITY

As of December 31, 2023 and September 30, 2023, there are no instruments accounted as a derivative liability.

The Company previously issued warrants (Series G and Series H warrants) that were accounted for the in accordance with ASC 815-10 as the Company is required to purchase the Series G, and Series H warrants for an amount of cash per share equal to $22.00 and $10.66, respectively, (the "Minimum Value"). Accordingly, the warrants were recorded as liabilities at the greater of the Minimum Value or fair value, and are marked to market each reporting period.

At December 31, 2022, the derivative liabilities were valued at their minimum value of $1,207,475, which was greater than the fair value determined using the Black Scholes Model. In March 2023, the Company entered into exchange agreements with the holders of the Series G warrants and the Series H warrants to exchange all outstanding warrants in shares of common stock.

4. CONVERTIBLE NOTES PAYABLE, SENIOR SECURED

	December 31, 2023	September 30, 2023
Senior Secured Convertible Promissory Notes (the "2022 Notes")	$ 4,230,000	$ 4,230,000
Unamortized debt discount	(46,965)	(710,897)
Net Balance	4,183,035	3,519,103
Current Balance	(4,183,035)	(3,519,103)
Non-Current Balance	-	-

In July 2022, the Company entered into a Securities Purchase Agreement (the "SPA") with certain institutional and accredited individual investors and issued Senior Secured Convertible Promissory Notes (the "2022 Notes") in the aggregate of $4,230,000 in exchange for cash proceeds of $3,525,000, net of original issue discount (OID) of $705,000.

The 2022 Notes are secured by tangible and intangible assets of the Company, bears interest at a rate of 10% per annum payable at maturity or upon conversion, matures January 6, 2024 (subsequently extended to March 15, 2024), and are convertible into shares of the Company's common stock at a conversion price of $9.14 per share. The 2022 Notes contain customary events of default. Further, events of default under the 2022 Notes also include (i) the unavailability of Rule 144 on or after January 6, 2023; (ii) our failure to deliver the shares of common stock to the 2022 Note holder upon exercise by such holder of its conversion rights under the 2022 Note; (iii) our loss of the "bid" price for its common stock and/or a market and such loss is not cured during the specified cure periods; and (iv) our failure to complete an uplisting of our Common Stock to any of the Nasdaq Global Market, Nasdaq Capital Market, New York Stock Exchange or NYSE American by March 15, 2024 (the "Uplist Transaction"). During the year ended September 2023, for no additional consideration, the 2022 Notes were amended several times in order to allow the Company to issue additional notes payable, extend the completion date for the Uplist Transaction, and amend certain provisions with regards to mandatory conversion of the notes upon the Uplist Transaction.

In connection with the issuance of the 2022 Notes, the Company granted the 2022 Notes noteholders 425,555 warrants to purchase shares of common stock. The warrants are fully vested, exercisable at $9.94 per share and expire in 5 years. The Company estimated the relative fair value of the warrants to be $1,470,000 using the Black Scholes option pricing model. The Company also issued note holders 63,834 shares of the Company's common stock with a relative fair value of $315,000. The Company also issued 31,510 warrants to purchase shares of common stock to the placement agent that assisted in the 2022 Notes offering. The placement agent warrants are fully vested, exercisable at $10.06 per share and will expire in 5 years. The Company estimated the relative fair value of the placement agent warrants to be $108,000 using the Black Scholes option pricing model. The Company incurred direct legal and professional fees of $271,000 as part of this offering.

The Company recorded 2022 Notes with total principal of $4,230,000. In addition, total debt discount of $2,870,000 was recorded to account for the 2022 Notes OID of $705,000, the relative fair value of the warrants of $1,578,000, the relative fair value of common stock issued of $315,000, and direct legal and professional fees incurred in the 2022 Notes offering of $271,000. The debt discount is being amortized over the term of the notes using the effective interest rate method. During the year ended September 30, 2022, the Company amortized debt discount of $302,000.

As of September 30, 2023, outstanding balance of the 2022 Notes payable was $4,230,000 and unamortized debt discount was $710,897, or a net balance of $3,519,103. During the three months ended December 31, 2023, the Company amortized debt discount of $663,932. As of December 31, 2023, outstanding balance of the 2022 Notes payable amounted to $4,230,000 and unamortized debt discount was $46,965, or a net balance of $4,183,035.

5. CONVERTIBLE NOTES PAYABLE, UNSECURED

	December 31, 2023	September 30, 2023
Exchanged notes (July 2022)	$ 699,781	$ 699,781
Second closing notes (January 2023)	636,000	636,000
Third closing notes (March, April, May, 2023)	702,720	702,720
Total	2,038,501	$ 2,038,501
Unamortized debt discount	(28,163)	(379,799)
Net Balance	2,010,338	1,658,702
Current Balance	(2,010,338)	(1,658,702)
Non-Current Balance	-	-

Exchanged Notes (July 2022)

In relation to the issuance of the 2022 Notes (see Note 4), certain noteholders of the Company's Series 2 note payable (see Note 6) agreed to exchange their Series 2 notes payable consisting of $600,000 principal and accrued interest of $99,781 for $699,781 of Unsecured Convertible Promissory Notes (the "Exchanged Notes") on substantially the same terms as the 2022 Notes, except that the Exchanged Notes are subordinate to the 2022 Notes and are unsecured. The notes bear interest at a rate of 10% per annum payable at maturity or upon conversion, mature January 6, 2024 (which was subsequently extended to March 15, 2024), and are convertible into shares of the Company's common stock at a conversion price of $9.14 per share. At December 31, 2023 and September 30, 2023, there was no discount recorded for the Exchanged Notes.

Second Closing Notes (January 2023)

In January 2023, pursuant to the SPA (see Note 8), as amended, investors agreed to purchase Unsecured Convertible Promissory Notes (the "Second Closing Notes") in the aggregate of $636,000 in exchange for cash proceeds of $530,000, net of original issue discount (OID) of $106,000. The notes are unsecured, bear interest at a rate of 10% per annum, mature January 6, 2024 (which was subsequently extended to March 15, 2024), and are convertible into shares of the Company's common stock with a conversion price of $9.14 per share.

In connection with the issuance of the Second Closing Notes, the Company granted the Second Closing Notes noteholders (i) 127,968 warrants to purchase shares of common stock. The warrants are fully vested, exercisable at $9.94 per share and expire in 5 years. The Company determined the relative fair value of the warrants to be $256,000 using the Black Scholes option pricing model; and (ii) 9,598 shares of common stock with a relative fair value of $26,000. The Company also issued 6,565 warrants to purchase shares of the Company's common stock to the placement agent who assisted in the Second Closing offering. The placement agent warrants are fully vested, exercisable at $10.06 per share and will expire in 5 years. The Company determined the relative fair value of the placement agent warrants to be $13,000 using the Black Scholes option pricing model. Furthermore, the Company also incurred direct legal and professional fees of $31,000 as part of this offering.

ThirdClosing Notes (March, April and May 2023)

In March, April and May 2023, pursuant to the SPA, as amended, investors agreed to purchase Unsecured Convertible Promissory Notes (the "Third Closing Notes") in the aggregate of $703,000 in exchange for cash proceeds of $488,000, net of original issue discount (OID) of $215,000. The notes are unsecured, bear interest at a rate of 10% per annum, originally matured January 6, 2024 (which was subsequently extended to March 15, 2024), and are convertible into shares of the Company's common stock with a conversion price of $9.14 per share.

In connection with the issuance of the Third Closing Notes, the Company granted the Third Closing Notes noteholders (i)141,396 warrants to purchase shares of common stock. The warrants are fully vested, exercisable at $9.94 per share and expire in5 years. The Company determined the relative fair value of the warrants to be $164,000 using the Black Scholes option pricing model; and (ii) 10,608 shares of common stock with a relative fair value of $18,000. The Company also incurred direct legal and professional fees of $5,000 as part of this offering.

The Second Closing Notes and Third Closing Notes contain events of default similar to the 2022 Notes. Subsequent to issuance, for no additional consideration, the Second Closing Notes and Third Closing Notes were amended several times in order to allow the Company to issue additional notes payable, extend the completion date of the Uplist Transaction, and amend certain provisions with regards mandatory conversion of the notes upon the Uplist Transaction.

Debt discount on unsecured convertible promissory notes

As a result of the issuance of the Second Closing and the Third Closing Notes, the Company recorded debt discount in the aggregate of $834,000 to account for the Second Closing and the Third Closing Notes OID of $321,000, the relative fair value of the warrants issued of $433,000, the relative fair value of common stock issued of $44,000, and direct legal and professional fees incurred of $36,000. The debt discount is being amortized over the term of the notes using the effective interest rate method.

As of September 30, 2023, outstanding balance of the Exchange notes, Second Closing Notes, and Third Closing Notes was $2,039,000 and unamortized debt discount of $380,000, or a net balance of $1,659,000. During the three month period ended December 31, 2023, the Company amortized debt discount of $351,636. As of September 30, 2023, outstanding balance of the Exchange notes, Second Closing Notes, and Third Closing Notes was $2,039,000 and unamortized debt discount of $28,163, or a net balance of $2,010,338.

6. CONVERTIBLE NOTES PAYABLE, SERIES 2

	December 31, 2023	September 30, 2023
Series 2 Convertible Notes (converted in November 2023)	$ -	$ 450,000
Total	-	450,000
Current Balance	-	(450,000)
Non-Current Balance	$ -	$ -

Series 2 Convertible Notes

On November 6, 2020, the Company issued its unsecured Series 2 10% Convertible Notes Payable in exchange for cash proceeds of $450,000. The notes matured on November 30, 2023, and the notes were all converted in November 2023.

During the year ended September 30, 2022, as a part of a separate 2022 Convertible Note Offering (see Note 4), certain holders of the Series 2 Notes agreed to exchange their Series 2 Notes with an aggregate principal amount of $600,000 and accrued interest of approximately $99,781 for promissory notes of the Company on substantially similar terms to those of the 2022 Notes (the “Exchanged Notes”, see Note 5).

As of September 30, 2023, outstanding balance of the Series 2 Convertible Notes amounted to $450,000. On November 30, 2023, the Series 2 Convertible Notes of $450,000 and outstanding accrued interest of $137,946, were converted into 52,918 shares of the Company’s common stock.

7. STOCKHOLDERS DEFICIT

Common Stock

On November 30, 2023, the Company issued a total of52,918 shares of Common Stock in full satisfaction of all previously outstanding Series 2 Convertible Notes with the principal balance of $450,000 and outstanding accrued interest of $137,946.

2013 Stock Incentive Plan

On June 18, 2013, the Company established the 2013 Stock Incentive Plan (the "*2013 Plan*"). Under the 2013 Plan, as of September 30, 2022, a maximum number of 170,571 shares of the Company's authorized and available common stock could be issued in the form of options, stock appreciation rights, sales or bonuses of restricted stock, restricted stock units or dividend equivalent rights, and an award may consist of one such security or benefit, or two or more of them in any combination or alternative. The 2013 Plan provides that on the first business day of each fiscal year commencing with fiscal year 2014, the number of shares of our common stock reserved for issuance under the 2013 Plan for all awards except for incentive stock option awards will be subject to increase by an amount equal to the lesser of (A) 15,000 Shares, (B) four (4) percent of the number of shares outstanding on the last day of the immediately preceding fiscal year of the Company, or (C) such lesser number of shares as determined by the Company's Board of Directors (the "*Board*"). The exercise price of each option shall be the fair value as determined in good faith by the Board at the time each option is granted. On October 1, 2022, the aggregate number of authorized shares under the Plan was further increased by 15,000 shares to a total of185,571 shares. On June 18, 2023, the 2013 Stock Incentive Plan expired.

The exercise price of each option is equal to the closing price of a share of the Company's Common Stock on the date of grant.

Common Stock Options

Stock compensation activity under the 2013 Plan for the three months ended December 31, 2023 follows:

	Option Shares Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at September 30, 2023	102,125	$ 38.00		
Awarded	-			
Forfeited/Cancelled	(1,825)	(67,000)		
Outstanding at December 31, 2023	100,300	$ 38.00	4.0	$ 11,000
Vested at December 31, 2023	86,119	$ 42.00	3.5	—
Vested and expected to vest at December 31, 2023	100,300	$ 38.00	4.5	—

On June 18, 2023, the 2013 Stock Incentive Plan expired. Therefore,no shares are available for future grants under the 2013 Plan as of December 31, 2023.

Share-based compensation expense recorded in the Company's Condensed Consolidated Statements of Operations for the three months ended December 31, 2023 and 2022 resulting from options awarded to the Company's employees, directors and consultants was approximately $29,000 and $104,000, respectively. Of this amount, during the three months ended December 31, 2023 and 2022, $6,000 and $14,000, respectively, were recorded as research and development expense, and $23,000 and $90,000, respectively were recorded as general and administrative expense in the Company's Condensed Consolidated Statements of Operations.

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During the three months ended December 31, 2023 and 2022, no options awarded were exercised.

As of December 31, 2023, there is approximately $85,000 of unrecognized compensation expense related to unvested stock-based compensation arrangements granted under the 2013 Plan. That cost is expected to be recognized over a weighted average period of 1.09 years.

Restricted Stock

For the three months ended December 31, 2023 and 2022, compensation expense recorded for the restricted stock awards was approximately $0 and $2,000, respectively. As of December 31, 2023, there were no unvested stock options.

8. SHAREHOLDER ADVANCES AND PREFUNDINGS RELATED TO ANTICIPATED BRIDGE FINANCING

Through December 31, 2023, the Company raised $950,000 in the form of shareholder advances from three different investors to support operations in advance of the Company's a prospective uplisting transaction. If the uplisting transactions are not consummated by March 31, 2024, as amended, the Company will be obligated to repay $500,000 of the advances within three business days thereafter.

9. SUBSEQUENT EVENTS

On February 1, 2024, the Prior Advancing Purchasers amended the terms of the Prior Advances to include the following terms: (i) if the Closing, as defined, does not occur on or before March 31, 2024, the Prior Advancing Purchasers shall have the option, in lieu of being repaid, to purchase (A) pre-funded warrants to purchase up to an aggregate of 484,966 shares of the Company's common stock and (B) common warrants to purchase up to an aggregate of 484,966 shares of Common Stock and (ii) if the Common Stock has not been approved by Nasdaq for listing on Nasdaq Capital Market by March 31, 2024, the Company shall issue to the Prior Advancing Purchasers (A) additional prefunded warrants to purchase up to an aggregate of 121,241 shares of Common Stock and (B) additional common warrants to purchase up to an aggregate of 121,241 shares of Common Stock.

Also on February 1, 2024, two additional parties advanced the Company an aggregate of $250,000, which are also being treated as advances in advance of the Company's a prospective uplisting transaction subject to the advance terms.

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

References in this Quarterly Report on Form 10-Q (this "Quarterly Report", or this "Report") to "Arch Biosurgery, Inc." "Company", "we", "us", "our", "Arch" or similar references mean Arch Therapeutics, Inc. and its condensed consolidated subsidiary, Arch Biosurgery, Inc. References to the "SEC" refer to the U.S. Securities and Exchange Commission.

Forward Looking Statements

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated condensed financial statements and the related notes included elsewhere in this Report. Our consolidated condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). The following discussion and analysis contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including, without limitation, statements regarding our expectations, beliefs, intentions or future strategies that are signified by the words "expect," "anticipate," "intend," "believe," or similar language. All forward-looking statements included in this Report are based on information available to us on the date hereof, and we assume no obligation to update any such forward-looking statements. Our business and financial performance are subject to substantial risks and uncertainties. Actual results could differ materially from those projected in the forward-looking statements. In evaluating our business, you should carefully consider the information set forth under the heading "Risk Factors" included Part I, Item 1A of our Annual Report on Form 10-K for the year ended September 30, 2022 (the "Annual Report"), as well as in Item II, Part 1A of this Report. Readers are cautioned not to place undue reliance on these forward-looking statements.

AC5, AC5-G, AC5-V, AC5-P, Crystal Clear Surgery, NanoDrape and NanoBioBarrier and associated logos are trademarks and/or registered trademarks of Arch Therapeutics, Inc. and its subsidiary. For purposes herein, references to regulatory approval and marketing authorization may be used interchangeably.

Corporate Overview

Arch Therapeutics, Inc. (together with its subsidiary, the "**Company**" or "**Arch**") is a biotechnology company developing and marketing a products based on our innovative AC5® self-assembling technology platform. Arch arose from the June 26, 2013 merger (the "**Merger**") of three entities previously known as Arch Biosurgery, Inc., Almah, Inc., and Arch Acquisition Corporation, respectively.

Almah, Inc., was incorporated under the laws of the State of Nevada on September 16, 2009 and, as part of the Merger transaction, changed its name to Arch Therapeutics, Inc. and abandoned both its prior business plan and operations in order to adopt those of ABS.

Arch Acquisition Corporation, or Merger Sub, was a wholly owned subsidiary of Almah, Inc., formed for the purpose of the Merger transaction, pursuant to which Merger Sub merged with and into ABS, and ABS thereafter became the wholly owned subsidiary of the Company. The ticker symbol under which its Common Stock trades changed from "AACH" to "ARTH", accordingly.

The Company's principal offices are located in Framingham, Massachusetts.

The Company has recently devoted a substantial part of its operational effort to the market adoption and commercial sales of AC5® Advanced Wound System, its first product. To date, the Company has principally raised capital through debt borrowings, the issuance of convertible debt, the issuance of units consisting of the Company's common stock, $0.001 par value per share ("*Common Stock*"), and warrants to purchase Common Stock ("*warrants*").

The Company expects to incur substantial expenses for the foreseeable future relating to research, development and commercialization of its potential products. However, there can be no assurance that the Company will be successful in securing additional resources when needed, on terms acceptable to the Company, if at all. Therefore, there exists substantial doubt about the Company's ability to continue as a going concern. The condensed consolidated financial statements do not include any adjustments related to the recoverability of assets that might be necessary despite this uncertainty.

Business Overview

We are a biotechnology company marketing and developing a number of products based on our innovative AC5® self-assembling technology platform. We believe these products can be important advances in the field of stasis and barrier applications, which includes managing wounds created during surgery, trauma or interventional care, or from disease; stopping bleeding (hemostasis); and controlling leaking (sealant). We have recently devoted a substantial part of our operational effort to the market adoption and commercial sales of AC5 Advanced Wound System, our first product. Our goal is to make care faster and safer for patients by providing products for use on external wounds, which we refer to as Dermal Sciences applications, and products for use inside the body, which we refer to as BioSurgery applications.

Core Technology

Our flagship products and product candidates are derived from our AC5 self-assembling peptide ("SAP") technology platform and are sometimes referred to as AC5 or the "*AC5 Devices*." These include AC5 Advanced Wound System and AC5 Topical Hemostat, which have received marketing authorization as medical devices in the United States (US) and the European Union (EU), respectively, and which are intended for skin applications, such as management of complicated chronic wounds and acute surgical wounds. Marketing for AC5 Topical Hemostat in the EU has not initiated. Other products are in development for use in minimally invasive or open surgical procedures, and include, for example, AC5-G™ for gastrointestinal endoscopic procedures, and AC5-V and AC5 Surgical Hemostat for hemostasis inside the body, all of which are currently investigational devices limited by law to investigational use.

Products based on the AC5 platform contain a biocompatible peptide that is synthesized from proteogenic, naturally occurring L-amino acids. Unlike products that contain traditional peptide sequences, when applied to a wound, AC5-based products intercalate into the interstices of the connective tissue and self-assemble into a protective physical-mechanical nanoscale structure that can provide a barrier to leaking substances, such as blood, while also acting as a biodegradable scaffold that enables healing. Self-assembly is a central component of the mechanism of action of our technology. Individual AC5 peptide units readily build themselves, or self-assemble, into an ordered network of nanofibrils when in aqueous solution by the following process:

- Peptide strands line up with neighboring peptide strands, interacting via hydrogen bonds (non-covalent bonds) to form a ribbon-like structure called a beta sheet.
- This process continues such that hundreds of strands organize with charged and polar side chains oriented on one face and non-polar side chains oriented on the opposite face of the beta sheets.
- Interactions of the resulting structure with water molecules and ions results in formation nanofibrils, which extend in length and can join together to form larger nanofibers.
- This network of AC5 peptide nanofibers forms the semi-solid physical-mechanical barrier that interacts with the extracellular matrix, is responsible for sealant, hemostatic and/or other properties, that may be observed even in the presence of antithrombotic agents (i.e., blood thinners), and which subsequently becomes the scaffold that supports the repair and regeneration of damaged tissue.

Based on the intended application, we believe that the underlying AC5 SAP technology can impart important features and benefits to our products that may include, for instance, stopping bleeding (hemostasis), mitigating contamination, modulating inflammation, donating moisture, and enabling an appropriate wound microenvironment conducive to healing. Furthermore, we believe that AC5 SAP technology permits cell and tissue growth and is self-healing, in that it can dynamically self-repair around migrating cells. For instance, AC5 Advanced Wound System, which is indicated for the management of partial and full-thickness wounds, such as pressure sores, leg ulcers, diabetic ulcers, and surgical wounds, is shipped and stored at room temperature, is applied directly as a liquid, can conform to irregular wound geometry, self-assembles into a wound care matrix that can provide clinicians with multi-modal support, and does not possess sticky or glue-like handling characteristics. We believe these properties enhance its utility in several settings and contribute to its user-friendly profile.

We believe that our technology lends itself to a range of potential applications for wounds inside or on the body, including those for which a hemostatic agent or sealant is needed. For instance, the results of certain preclinical and clinical investigations that either we have conducted, or others have conducted on our behalf, have shown quick and effective hemostasis with the use of AC5 SAP technology, and that time to hemostasis (THH) is comparable among test subjects regardless of whether such test subject had or had not been treated with therapeutic doses of anticoagulant or antiplatelet medications, commonly called "blood thinners." Furthermore, the transparency and physical properties of certain AC5 Devices may enable a surgeon to operate through it in order to maintain a clearer field of vision and prophylactically stop or lessen bleeding as surgery starts, a concept that we call Crystal Clear Surgery™. An example of a product that contains related features and benefits is AC5 Topical Hemostat, which is indicated for use as a dressing and to control mild to moderate bleeding, each during the management of injured skin and the micro-environment of an acute surgical wound. AC5 Topical Hemostat has not yet been marketed in Europe but has received marketing authorization.

Sales and marketing efforts for our AC5 Advanced Wound System, which has received 510(k) marketing clearance from the FDA, address the demand for improved solutions to treat challenging chronic and acute surgical wounds, with a particular early focus on diabetic foot ulcers, venous leg ulcers and pressure ulcers. Chronic wounds are typically defined as wounds that have not healed after four weeks of standard care. Approximately 4 million to 6.5 million new onset chronic wounds are estimated to occur in the US annually, including approximately 700,000 to 2 million diabetic foot ulcers, 2.5 million pressure ulcers, and 1.2 million venous leg ulcers. If untreated, improperly treated or unresponsive to treatment, these wounds can ultimately lead to amputation. The 5-year mortality rate among patients with chronic wounds, especially after an amputation, is significant.

Published data on AC5 Advanced Wound System shows encouraging outcomes, including limb salvage (avoided limb loss), among patients with multiple co-morbidities and challenging chronic wounds that failed to heal despite treatment with either traditional or other advanced wound care modalities over prolonged periods of time.

Operations

We have recently started to commercialization AC5 Advanced Wound System. We rely on both an internal commercial team and independent sales distributors to drive awareness and adoption of AC5 Advanced Wound System in several targeted channels with a particular focus on physician offices and government channels, such as Veterans Health Administration (VA) hospitals and military treatment facilities. We anticipate that material growth in the physician office setting will require product reimbursement. To that end, we applied to the Centers for Medicare and Medicaid Services (CMS) for a dedicated Healthcare Common Procedure Coding System (HCPCS) Level II reimbursement code specific to AC5 Advanced Wound System to better enable providers to bill third party payors for AC5 that is used in doctors' offices. The unique HCPCS code, A2020, was granted and made effective on April 1, 2023.

In support of the government market, we partnered with Lovell Government Services (LGS), a service-disabled veteran-owned small business, to be our government channel distributor. As a direct result of our relationship with LGS, AC5 Advanced Wound System has been added to the four major government contracting vehicles: Federal Supply Schedule (FSS), General Services Administration (GSA) schedule, Defense Logistics Agency's Medical Electronic Catalog Program (ECAT), and Distribution and Pricing Agreement (DAPA). This listing enables purchase by federal government agencies, including the Department of Veterans Affairs (VA), Indian Health Services (IHS), and Department of Defense (DOD) Medical Treatment Facilities, and allows doctors in government channels to order AC5 Advanced Wound System.

We will continue to seek partnerships with reputable, value-added independent sales distributors on a case-by-case basis to expand the overall reach and footprint of its total sales organization. Presently, our commercialization efforts and resources remain dedicated to the US market for advanced wound care.

Much of our operational efforts to date, which we often perform in collaboration with partners, have included selecting compositions and formulations for our initial products; conducting preclinical studies, including safety and other tests; conducting a human trial for safety and performance of AC5; developing and conducting a human safety study to assess for irritation and sensitization potential; securing marketing authorization for our first product in the United States and in Europe; supporting surgeons performing clinical case studies; obtaining post-marketing clinical data; developing, optimizing, and validating manufacturing methods and formulations, which are particularly important components of self-assembling peptide development; developing methods for manufacturing scale-up, reproducibility, and validation; engaging with regulatory authorities to seek early regulatory guidance as well as marketing authorization for our products; sourcing and evaluating commercial partnering opportunities in the United States and abroad; and developing and protecting the intellectual property rights underlying our technology platform.

Our long-term business plan includes the following goals:

- growing revenues and building upon recent commercial momentum by driving product awareness, continued adoption and favorable payment policies for AC5 Advanced Wound System with the now-effective CMS Level II HCPCS code dedicated to the AC5;
- conducting biocompatibility, pre-clinical, and clinical studies on our products and product candidates;
- obtaining additional marketing authorization for products in the United States, Europe, and other jurisdictions as we may determine;
- continuing to develop third party relationships to manufacture, distribute, market and otherwise commercialize our products;
- continuing to develop third party relationships to collaborate on product research and development;
- expanding and maintaining protection of our intellectual property portfolio; and
- developing additional product candidates in Dermal Sciences, BioSurgery, and other areas.

To support our long-term business goals, we expect to focus on the following activities during the next twelve months:

- further develop our product clinical profile;
- enhance product packaging features;
- identify and address opportunities for supply chain efficiencies;
- assess our technology platform in order to identify and select product candidates for potential advancement into development;
- seek additional funding as required to support the previously described milestones necessary to support our operations;
- continue to expand and enhance our financial and operational reporting and controls;
- pursue commercial partnerships; and
- expand and enhance our intellectual property portfolio by filing new patent applications, obtaining allowances on currently filed patent applications, and/or adding to our trade secrets in self-assembly, manufacturing, analytical methods and formulation, as appropriate.

In addition to capital required for operating expenses, depending upon input from regulatory authorities, authorized representatives, patent and trademark offices, or other agencies in the US, EU or elsewhere, as well as for potential additional regulatory filings and approvals during the approximately next two years, additional capital will be required.

We have no commitments for any future capital. As indicated above, we will require significant additional financing to fund our planned operations, including further research and development relating to AC5, seeking regulatory approval of that or any other product we may choose to develop, commercializing any product for which we are able to obtain regulatory approval or certification, seeking to license or acquire new assets or business, and maintaining our intellectual property rights, pursuing new technologies and for financing the investor relations and incremental administrative costs associated with being a public corporation. We do not presently have, nor do we expect in the near future to have, sufficient revenue to fund our business from operations, and we will need to obtain substantially all of our necessary funding from external sources for the foreseeable future. We may not be able to obtain additional financing on commercially reasonable or acceptable terms when needed, or at all. If we cannot raise the money that we need in order to continue to develop our business, we will be forced to delay, scale back or eliminate some or all of our proposed operations. If any of these were to occur, there is a substantial risk that our business would fail, and our stockholders could lose all of their investment.

Since inception, we have funded our operations primarily through debt borrowings, the issuance of convertible debt and the issuance of units consisting of Common Stock and warrants, and we may continue to seek to do so in the future. If we obtain additional financing by issuing equity securities, our existing stockholders' ownership will be diluted. The terms of securities we may issue in future capital-raising transactions may be more favorable for our new investors. Further, newly issued securities may include preferences, superior voting rights and the issuance of warrants or other derivative securities, which may have additional dilutive effects. If we obtain additional financing by incurring debt, we may become subject to significant limitations and restrictions on our operations pursuant to the terms of any loan or credit agreement governing the debt. Further, obtaining any loan, assuming a loan on acceptable terms would be available when needed, would increase our liabilities and future cash commitments. We may also seek funding from additional collaboration or licensing arrangements in the future, which may require that we relinquish potentially valuable rights to our product candidates or proprietary technologies or grant licenses on terms that are not favorable to us. Moreover, regardless of the manner in which we seek to raise capital, we may incur substantial costs in those pursuits, including investment-banking fees, legal fees, accounting fees, printing and distribution expenses and other related costs..

The estimated capital requirements potentially could increase significantly if a number of risks relating to conducting these activities were to occur, including without limitation those set forth under the heading "*RISK FACTORS*" in our Annual Report. We anticipate that our operating and other expenses will continue to increase as we continue to implement our business plan and pursue and achieve these goals. After giving effect to the funds received in past equity and debt financings and assuming our use of that funding at the rate we presently believe that, as of February 14, 2024, our current cash on hand will meet our anticipated cash requirements into the second quarter of fiscal 2024.

Manufacturing

We work with contract manufacturing and related organizations, including those operating under cGMP, as is required by applicable regulatory agencies for production of product that can be used for preclinical and human testing as well as for commercial use. We also have engaged and continue to engage other third parties in the United States and abroad to advise on and perform certain manufacturing and related activities, typically with assistance from our team. The activities include development of our primary product candidates, as well as generation of appropriate analytical methods, scale-up, and other procedures for use by manufacturers and/or other members of our supply chain to produce or process our products at current and/or larger scale quantities for research, development, and commercialization.

Our products are regulated as medical devices, and as such, many of our activities have focused on optimizing traditional parameters to target specifications, biocompatibility, physical appearance, stability, and handling characteristics, among other metrics, to achieve the desired product. We and our partners intend to continue to monitor manufacturing processes and formulation methods closely, as success or failure in establishing and maintaining appropriate specifications may directly impact our ability to conduct additional preclinical and clinical trials and/or deliver commercial product.

We believe that the manufacturing methods used for a product, including the type and source of ingredients and the burden of waste byproduct elimination, are important determinants of its opportunity for profitability. Industry participants are keenly aware of the downsides of products that rely on expensive biotechnology techniques and facilities for manufacture, onerous and expensive programs to eliminate complex materials, or ingredients that are sourced from the complicated process of human or other animal plasma separation, since those products typically are expensive, burdensome to produce, and at greater risk for failing regulatory oversight.

The manufacturing methods that we use to produce our current products rely on detailed, complex and difficult to manage synthetic organic chemistry processes. Although use of those methods requires that we engage manufacturers that possess the expertise, skill and know-how involved with those methods, the required equipment to use those methods is widely available. Our current products are synthesized from naturally occurring ingredients amino acids that, while not sourced from humans or other animals, do exist in their natural state in humans. That type of ingredient may be more likely to be categorized as “generally recognized as safe”, or “GRAS”, by the FDA.

Recent Developments

On January 5, 2024, the Company entered into an amendments into with the holders of the Company’s outstanding 2022 Notes, Second Notes, and Third Notes. Under the amendments, the notes were amended to extend the date of the completion of an uplist transaction, as defined, and to extend the respective maturity date of each of notes, from January 6, 2024, to March 15, 2024.

Results of Operations

The following discussion of our results of operations should be read together with the unaudited interim condensed consolidated financial statements included in this Report. The period-to-period comparisons of our interim results of operations that follow are not necessarily indicative of future results.

Three Months Ended December 31, 2023 Compared to Three Months Ended December 31, 2022

	December 31, 2023	December 31, 2022	Increase (Decrease) $
Revenue	$ 45,867	$ 6,261	39,606
Operating expenses:			-
Cost of revenues	23,606	17,635	5,971
Selling, general and administrative	1,311,350	1,102,916	208,434
Research and development	205,580	161,453	44,127
Loss from operations	(1,494,669)	(1,275,743)	218,926
Other expense	(1,186,983)	(524,313)	662,670
Net loss	$ (2,681,652)	$ (1,800,056)	881,596

Revenue

Revenue for the three months ended December 31, 2023 was $45,867, an increase of $39,606 compared to revenue of $6,261 for the three months ended December 31, 2022. Revenue for the three months ended December 31, 2022 was the result of transactions into VA Hospitals through our distribution partner, Lovell Government Services ("LGS"). Revenue for the three months ended December 31, 2023 was the result of transactions into VA Hospitals through LGS, and transactions leveraging the dedicated HCPCS code (A2020) that went effective April 1, 2023 through a growing number of providers and offices working with the Company to submit reimbursement claims with numerous payors.

Cost of Revenues

Cost of revenue during the three months ended December 31, 2023 was $23,606, an increase of $5,971 compared to cost of revenue of $17,635 for the three months ended December 31, 2022. Cost of revenue includes product costs, third party warehousing, overhead allocation, royalty and shipping costs.

Selling, General and Administrative Expense

Selling, general and administrative expense during the three months ended December 31, 2023 was $1,311,350, an increase of $208,434 compared to $1,102,916 for the three months ended December 31, 2022. The increase in selling, general and administrative expense for the three months ended December 31, 2023 is primarily attributable to an increase in professional service costs, most notably legal costs related to financing activities.

Research and Development Expense

Research and development expense during the three months ended December 31, 2023 was $205,580 an increase of $44,127 compared to $161,453 for the three months ended December 31, 2022. The increase in research and development expense is primarily attributable to a decrease in compensation costs attributed to a reduction in headcount.

Other Expense

Other expense during the three months ended December 31, 2023 was $1,186,983, an increase of $662,670 compared to other expense of $524,313 for the three months ended December 31, 2022. The increase in other expense is primarily attributed to an increase in interest expense related to the amortization of debt discount and debt issuance costs for 2022 Notes, Second Notes and Third Notes as well as increase in related interest expense.

Liquidity and Capital Resources

In the first calendar quarter of 2021, the Company commenced commercial sales of our first product, AC5® Advanced Wound System. We devote a significant amount of our efforts on fundraising as well as planning and conducting product research and development and activities in connection with obtaining regulatory marketing authorization. We have principally raised capital through the issuance of convertible debt and units consisting of Common Stock and warrants to fund our operations.

Working Capital

At December 31, 2023, we had total current assets of $1,814,498 (including cash of $205,850) and working capital deficit of $9,582,965. Our working capital as of December 31, 2023 and September 30, 2023 are summarized as follows:

	December 31, 2023	September 30, 2023
Total Current Assets	$ 1,814,498	$ 1,950,090
Total Current Liabilities	11,397,463	9,465,921
Working Capital Deficit	$ (9,582,965)	$ (7,515,831)

Total current assets as of December 31, 2023 were $1,814,498, a decrease of $135,892 compared to $1,950,090 as of September 30, 2023. The decrease in current assets is primarily attributable to a decrease in cash and prepaid expenses. Our total current assets as of December 31, 2023 and September 30, 2023 were comprised primarily of cash, inventory and prepaid expenses and other current assets.

Total current liabilities as of December 31, 2023 were $11,397,463, an increase of $1,931,542 compared to $9,465,921 as of September 30, 2023. The increase is primarily due to an increase in shareholder advances and accounts payable, and amortization of the debt discount and debt issuance costs for the notes partially offset by a decrease to the amount owed in connection with the financing of certain insurance premiums and the decrease in the fair value of the derivative liability resulting from the exchange of the Series G warrants into common stock.

Cash Flow for the Three Months Ended December 31, 2023 Compared to the Three Months Ended December 31, 2022

	December 31, 2023	December 31, 2022
Cash Used in Operating Activities	$ (862,605)	$ (650,065)
Cash Provided by (Used in) Financing Activities	845,735	(86,257)
Net decrease in Cash	$ (16,870)	$ (736,322)

Cash Used in Operating Activities

Cash used in operating activities increased by $212,540 to $862,605 during the three months ended December 31, 2023, compared to $650,065 during the three months ended December 31, 2022. The increase in cash used in operating activities is primarily attributable to the increase in spending for selling, general and administrative expense during the period.

Cash Used in Financing Activities

Cash provided by financing activities increased by $931,992 to $845,735 during the three months ended December 31, 2023, compared to $86,254 cash used in financing activities during the three months ended December 31, 2022. For the three months ended December 31, 2023, the cash provided by financing activities was attributable to the Shareholder and third-party advances related to bridge financing, which was partially offset by payments made in connection with the financing of certain insurance premiums. For the three months ended December 31, 2022, the cash used in financing activities resulted from offset by payments made in connection with the financing of certain insurance premiums

Cash Requirements

We anticipate that our operating expenses, interest expense and other expenses will increase significantly as we continue to implement our business plan and pursue our operational goals. Depending upon additional input from EU and US regulatory authorities, however, we do not expect to generate sufficient revenues from operations before we will need to raise additional capital. Further, our estimates regarding our use of cash could change if we encounter unanticipated difficulties or other issues arise, including without limitation those set forth under the heading “RISK FACTORS” described in our Annual Report, in which case our current funds may not be sufficient to operate our business for the period we expect.

In the first quarter of 2021, the Company commenced commercial sales of our first product, AC5® Advanced Wound System. That revenue will not be sufficient to fund our business operations and we will need to obtain additional funding from external sources for the foreseeable future. We do not have any commitments for future capital. Significant additional financing will be required to fund our planned operations in the near term and in future periods, including research and development activities relating to our potential new product candidates, seeking regulatory approval of any other product candidates we may choose to develop, commercializing any product candidates for which we are able to obtain regulatory approval or certification, seeking to license or acquire new assets or businesses, and maintaining our intellectual property rights and pursuing rights to new technologies. We may not be able to obtain additional financing on commercially reasonable or acceptable terms when needed, or at all. We are bound by certain contractual terms and obligations that may limit or otherwise impact our ability to raise additional funding in the near-term including, but not limited to, provisions in the 2022 SPA (see Note 8) and 2023 SPA (see Notes 2 and 12) restricting our ability to effect or enter into an agreement to effect any issuance by the Company or any of its subsidiaries of Common Stock or securities convertible, exercisable or exchangeable for Common Stock (or a combination of units thereof) involving a Variable Rate Transaction. These restrictions and provisions could make it more challenging for us to raise capital through the incurrence of debt or through equity issuances. If we cannot raise the money that we need in order to continue to develop our business, we will be forced to delay, scale back or eliminate some or all of our proposed operations. If any of these were to occur, there is a substantial risk that our business would fail, and our stockholders could lose all of their investments.

As previously noted, since inception we have funded our operations primarily through equity and debt financings and we expect to continue to seek to do so in the future. If we obtain additional financing by issuing equity securities, our existing stockholders' ownership will be diluted. Additionally, the terms of securities we may issue in future capital-raising transactions may be more favorable for our new investors, and in particular may include preferences, superior voting rights and the issuance of warrants or other derivative securities, which may have additional dilutive effects. If we obtain additional financing by incurring debt, we may become subject to significant limitations and restrictions on our operations pursuant to the terms of any loan or credit agreement governing the debt. Further, obtaining any loan, assuming a loan would be available when needed on acceptable terms, would increase our liabilities and future cash commitments. We may also seek funding from collaboration or licensing arrangements in the future, which may require that we relinquish potentially valuable rights to our product candidates or proprietary technologies or grant licenses on terms that are not favorable to us. Moreover, regardless of the manner in which we seek to raise capital, we may incur substantial costs in those pursuits, including investment banking fees, legal fees, accounting fees, printing and distribution expenses and other related costs.

Going Concern

We have commenced commercial sales of our first product, AC5® Advanced Wound System. From inception, we have had recurring losses from operations. The continuation of our business as a going concern is dependent upon raising additional capital and eventually attaining and maintaining profitable operations. As of December 31, 2023, there is substantial doubt about the Company's ability to continue as a going concern. The financial statements included in this Annual Report do not include any adjustments that might be necessary should operations discontinue.

Critical Accounting Policies and Significant Judgments and Estimates

Pursuant to certain disclosure guidance issued by the SEC, the SEC defines "critical accounting policies" as those that require the application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. Our critical accounting policies that we anticipate will require the application of our most difficult, subjective or complex judgments are as follows:

Use of Estimates

Management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenue and expense during the reporting periods. Significant estimates include the assumptions used in the accrual for potential liabilities, the net realizable value of inventory, the valuation of debt and equity instruments, the fair value of derivative liabilities, valuation of equity instruments issued for services, and deferred tax valuation allowances. Actual results could differ from those estimates.

Accounting for Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with the guidance of FASB ASC Topic 718, *Compensation-Stock Compensation* ("*ASC 718*"), which requires all share-based payments be recognized in the condensed consolidated financial statements based on their fair values. In accordance with ASC 718, the Company has elected to use the Black-Scholes Option Pricing Model (the "*Black-Scholes Model*") to determine the fair value of options granted and recognizes the compensation cost of share-based awards on a straight-line basis over the vesting period of the award.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Internal control over financial reporting is a process designed by, or under the supervision of, the Principal Executive Officer and Principal Financial Officer and effected by our Board of Directors, management and other personnel, 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. Under the supervision and with the participation of our Principal Executive Officer and Principal Financial Officer, management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control — Integrated Framework* issued in 2013 by the Committee of Sponsoring Organizations ("*COSO*"). As of December 31, 2023, our Principal Executive Officer and Principal Financial Officer concluded that our disclosure controls and procedures were effective.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal controls over financial reporting that occurred during the quarter ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting. From time to time, we make changes to our internal control over financial reporting that are intended to enhance its effectiveness, and which do not have a material effect on our overall internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

In the ordinary course of business, we may become a party to legal proceedings involving various matters. We are unaware of any such legal proceedings presently pending to which we or our subsidiary is a party or of which any of our property is the subject that management deems to be, individually or in the aggregate, material to our financial condition or results of operations.

Item 1A. Risk Factors

In addition to the other information set forth in this Report, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" of our Annual Report, which could materially affect our business, financial condition or future results. The risks described in our Annual Report may not be the only risks facing the Company. Additional risks and uncertainties not currently known to the Company or that the Company currently deems to be immaterial also may materially adversely affect the Company's business, financial condition and/or operating results.

There were no material changes to the risk factors previously disclosed in our Annual Report.

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

Not applicable

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Not applicable

Item 6. Exhibits

Exhibit No.	Exhibit Title	Filed Herewith	Incorporated by Reference			
			Form	Exhibit No.	File No.	Filing Date
10.1	Form of PIPE Pre-Funded Warrant		S-1/A	4.7	333-268008	11/09/23
10.2	Form of PIPE Investor Warrant		S-1/A	4.8	333-268008	11/09/23
10.3	Form of PIPE Placement Agent Warrant		S-1/A	4.9	333-268008	11/09/23
10.4	Form of True-Up Pre-Funded Warrant		S-1/A	4.10	333-268008	11/09/23
10.5	Form of 2022 Note Conversion Pre-Funded Warrant		S-1/A	4.11	333-268008	11/09/23
10.6	Form of Uplist Conversion Warrant		S-1/A	4.12	333-268008	11/09/23
10.7	Form of Exchange Investor Warrant		S-1/A	4.13	333-268008	11/09/23
10.8	Form of Amendment No. 11 to First Notes, dated September 30, 2023		8-K	10.1	000-54986	10/04/23
10.9	Form of Amendment No. 12 to First Notes		S-1/A	10.37.12	333-268008	11/09/23
10.10	Form of Amendment No. 11 to Second Notes, dated September 30, 2023		8-K	10.2	000-54986	10/04/23
10.11	Form of Amendment No. 12 to Second Notes		S-1/A	10.41.12	333-268008	11/09/23
10.12	Form of Amendment No. 6 to Third Notes, dated September 30, 2023		8-K	10.3	000-54986	10/04/23
10.13	Form of Amendment No. 7 to Third Notes		S-1/A	10.47.7	333-268008	11/09/23
10.14	Form of Amendment No. 2 to Second A&R Registration Rights Agreement		S-1/A	10.49.2	333-268008	11/09/23
10.15	Form of Amendment No. 2 to Securities Purchase Agreement		S-1/A	10.52.2	333-268008	11/09/23
10.16	Form of Amendment No. 1 to Registration Rights Agreement		S-1/A	10.53.1	333-268008	11/09/23
10.17	Form of Amendment No. 2 to Registration Rights Agreement		S-1/A	10.53.2	333-268008	11/09/2023
10.18	Form of PIPE Securities Purchase Agreement		S-1/A	10.54	333-268008	11/09/2023
10.19	Form of PIPE Registration Rights Agreement		S-1/A	10.55	333-268008	11/09/2023
10.20	PIPE Placement Agency Agreement		S-1/A	10.56	333-268008	11/09/2023
10.21	Form of Bridge Lock-Up Agreement		S-1/A	10.57	333-268008	11/09/23
10.22	Form of Amendment No. 13 to the First Notes, dated November 21, 2023		8-K	10.1	000-54986	11/22/23
10.23	Form of Amendment No. 13 to the Second Notes, dated November 21, 2023		8-K	10.2	000-54986	11/22/23
10.24	Form of Amendment No. 8 to the Third Notes, dated November 21, 2023		8-K	10.3	000-54986	11/22/2023
10.25	Form of Amendment No. 3 to Second A&R Registration Rights Agreement		8-K	10.4	000-54986	11/22/2023
10.26	Form of Amendment No. 3 to the Bridge Registration Rights Agreement		8-K	10.5	000-54986	11/22/2023
10.27	Form of Amendment No. 14 to the First Notes, dated January 5, 2024		8-K	10.1	000-54986	01/11/2024
10.28	Form of Amendment No. 14 to the Second Notes, dated January 5, 2024		8-K	10.2	000-54986	01/11/2024
10.29	Form of Amendment No. 9 to the Third Notes, dated January 5, 2024		8-K	10.3	000-54986	01/11/2024
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) under the Securities and Exchange Act of 1934	X				
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) under the Securities and Exchange Act of 1934	X				
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, executed by Terrence W. Norchi, President and Chief Executive Officer, and Michael S. Abrams, Chief Financial Officer and Treasurer	X				
101.INS	Inline XBRL Instance Document					
101.SCH	Inline XBRL Taxonomy Extension Schema Document					
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					
104	Cover Page Interactive Data File (Embedded within the Inline XBRL document and included in Exhibit 101)					

* Pursuant to Item 601(b)(10) of Regulation S-K, certain identified information has been excluded from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed. Further, the schedules and exhibits to this agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the Securities and Exchange Commission upon request.

SIGNATURE

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

ARCH THERAPEUTICS, INC.

Date: February 20, 2024

By: /s/ TERRENCE W. NORCHI, MD

Terrence W. Norchi, MD

President and Chief Executive Officer

(Principal Executive Officer)

Date: February 20, 2024

By: /s/ MICHAEL S. ABRAMS

Michael S. Abrams

Chief Financial Officer

(Principal Financial and Accounting Officer)

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULE 13A-14(A) OR 15D-14(A) UNDER THE SECURITIES AND EXCHANGE ACT OF 1934

I, Terrence W. Norchi, certify that:

1.I have reviewed this Form 10-Q of Arch Therapeutics, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: February 20, 2024

/s/ TERRENCE W. NORCHI, MD
Name: *Terrence W. Norchi, MD*
Title: *President and Chief Executive Officer*
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULE 13A-14(A) OR 15D-14(A) UNDER THE SECURITIES AND EXCHANGE ACT OF 1934

I, Michael S. Abrams, certify that:

1.I have reviewed this Form 10-Q of Arch Therapeutics, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: February 20, 2024

/s/ MICHAEL S. ABRAMS
Name: Michael S. Abrams
Title: *Chief Financial Officer*
(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION REQUIRED BY
SECTION 1350 OF TITLE 18 OF THE UNITED STATES CODE

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned officers of Arch Therapeutics, Inc. (the "*Company*") certify that the quarterly report of the Company on Form 10-Q for the fiscal quarter ended December 31, 2023 fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, and that the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 20, 2024

/s/ TERRENCE W. NORCHI, MD
Name: Terrence W. Norchi, MD
Title: *President and Chief Executive Officer*
(Principal Executive Officer)

Date: February 20, 2024

/s/ MICHAEL S. ABRAMS
Name: Michael S. Abrams
Title: *Chief Financial Officer*
(Principal Financial and Accounting Officer)

This certification accompanies this Report on Form 10-Q pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "*Exchange Act*"). Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.