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 March 31, 2024

☐ 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 May1, 2024, 4,444,363 shares of the registrant's common stock were outstanding.

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

TABLE OF CONTENTS

Arch Therapeutics, Inc. and Subsidiary
Condensed Consolidated Balance Sheets
As of March 31, 2024 (Unaudited) and September 30, 2023

	March 31, 2024 (unaudited)	September 30, 2023
ASSETS		
Current assets:		
Cash	$ 26,426	$ 222,720
Inventory	1,329,593	1,364,504
Prepaid expenses and other current assets	177,158	362,866
Total current assets	1,533,177	1,950,090
Long-term assets:		
Property and equipment, net	3,390	4,599
Other assets	3,500	3,500
Total long-term assets	6,890	8,099
Total assets	$ 1,540,067	$ 1,958,189
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 2,969,520	$ 2,304,207
Accrued interest	1,026,963	823,128
Shareholders advances related to bridge financing	1,125,000	-
Accrued expenses and other liabilities	363,092	467,496
Insurance premium financing	34,755	243,285
Convertible notes payable, senior secured, current portion, net of discount	4,211,720	3,519,103
Convertible notes payable, unsecured, current portion, net of discount	2,686,501	1,658,702
Convertible notes payable, Series 2, unsecured, current portion	-	450,000
Total current liabilities	12,417,551	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 March 31, 2024 and September 30, 2023	-	-
Common stock, $0.001 par value, 350,000,000 authorized as of March 31, 2024 and September 30, 2023; 4,444,364 and 4,689,446 shares issued and outstanding as of March 31, 2024 and September 30, 2023	4,444	4,689
Additional paid-in capital	55,324,472	54,543,188
Accumulated deficit	(66,206,400)	(62,055,609)
Total stockholders' deficit	(10,877,484)	(7,507,732)
Total liabilities and stockholders' deficit	$ 1,540,067	$ 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 and Six Months Ended March 31, 2024 and 2023

	For the three months ended		For the six months ended	
	March 31, 2024	March 31, 2023	March 31, 2024	March 31, 2023
Revenue	$ 31,866	$ 16,654	$ 77,733	$ 22,914
Operating expenses:				
Cost of revenues	21,555	18,718	45,161	36,353
Selling, general and administrative expenses	683,184	1,252,786	1,994,534	2,355,701
Research and development expenses	203,869	170,634	409,449	332,087
Total operating expenses	908,608	1,442,138	2,449,144	2,724,141
Loss from operations	(876,742)	(1,425,484)	(2,371,411)	(2,701,227)
Other (expense) income:				
Interest expense	(592,397)	(635,190)	(1,779,380)	(1,159,503)
Gain on extinguishment of derivative liabilities	-	1,158,197	-	1,158,197
Total other (expense) income, net	(592,397)	523,007	(1,779,380)	(1,306)
Net loss	$ (1,469,139)	$ (902,477)	$ (4,150,791)	$ (2,702,533)
Net loss per common share - basic and diluted	$ (0.33)	$ (0.71)	$ (0.90)	$ (2.15)
Weighted common shares - basic and diluted	4,497,111	1,263,585	4,602,623	1,258,099

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 and Six Months Ended March 31, 2024 and 2023

	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)
Net loss	-	-	-	-	-	(1,469,139)	(1,469,139)
Issuance of common stock upon conversion of convertible notes	-	-	2,000	2	18,278	-	18,280
Issuance of warrants, net of financing costs	-	-	-	-	148,891	-	148,891
Exchange of common stock into warrants	-	-	(300,000)	(300)	300	-	-
Balance at March 31, 2024	-	$ -	4,444,364	$ 4,444	$ 55,324,472	$ (66,206,400)	$ (10,877,484)
Balance at September 30, 2022	-	$ -	1,252,734	$ 1,252	$ 50,878,718	$ (55,072,773)	$ (4,192,803)
Net loss	-	-	-	-	-	(1,800,056)	(1,800,056)
Stock-based compensation expense	-	-	-	-	104,026	-	104,026
Balance at December 31, 2022	-	-	1,252,734	1,252	50,982,744	(56,872,829)	(5,888,833)
Net loss	-	-	-	-	-	(902,477)	(902,477)
Vesting of restricted stock	-	-	250	-	-	-	-
Issuance of common stock and warrants, net of financing costs	-	-	9,598	10	287,410	-	287,420
Exchange of warrants into common stock	-	-	12,019	13	49,265	-	49,278
Stock-based compensation expense	-	-	-	-	68,524	-	68,524
Balance at March 31, 2023	-	$ -	1,274,601	$ 1,275	$ 51,387,943	$ (57,775,306)	$ (6,386,088)

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 Six Months Ended March 31, 2024 and 2023

	For the Six Months Ended	
	March 31, 2024	**March 31, 2023**
Cash flows from operating activities:		
Net loss	$ (4,150,791)	$ (2,702,533)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation	1,209	1,043
Stock-based compensation	25,909	172,550
Gain on extinguishment of derivative liabilities	-	(1,158,197)
Accretion of discount and debt issuance costs on convertible notes payable	1,437,588	846,147
Changes in operating asset and liabilities:		
Inventory	34,911	12,464
Prepaid expenses and other current assets	185,707	280,058
Accounts payable	665,314	1,097,894
Accrued interest	341,793	313,356
Accrued expenses and other liabilities	(104,404)	(112,713)
Net cash used in operating activities	(1,562,764)	(1,249,931)
Cash flows from financing activities:		
Repayment of insurance premium financing	(208,530)	(212,514)
Shareholder advances related to bridge financing	1,125,000	230,000
Proceeds from unsecured convertible notes	450,000	515,000
Net cash provided by financing activities	1,366,470	532,486
Net decrease in cash	(196,294)	(717,445)
Cash, beginning of period	222,720	746,940
Cash, end of period	$ 26,426	$ 29,495
Non-cash financing activities:		
Exchange of Senior Secured and Series 2 Convertible notes and accrued interest into common stock	$ 606,239	$ -
Relative fair value of warrants issued – fourth close	$ 148,891	$ -
Conversion of convertible notes and accrued interest to common stock, net	$ 606,239	$ -
Exchange of Series G and Series H warrants for common stock	$ -	$ 49,278
Issuance of restricted stock	$ -	$ 3,019
Fair value of warrants issued - second close	$ -	$ 256,439
Fair value of inducement shares issued - second close	$ -	$ 25,840
Fair value of placement agent warrants - second close	$ -	$ 28,093

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 products based on our innovative AC5® self-assembling technology platform. The Company's products are 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. 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 March 31, 2024, and the results of its operations and its cash flows for the three and six months ended March 31, 2024 and 2023. The balance sheet as of September 30, 2023 is derived from the Company's audited financial statements. The results of operations for the three and six months ended March 31, 2024 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 six months ended March 31, 2024, the Company recorded a net loss of $4,150,791 and used cash in operations of $1,562,764. 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. In addition, the Company's independent registered public accounting firm, in its report on the Company's September 30, 2023, financial statements, raised substantial doubt about the Company's ability to continue as a going concern. 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 current and 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 l200, 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 March 31, 2024 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, 2022 Notes, Second Notes, Third Notes and the Fourth Notes 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. During the three months ended March 31, 2023, $1,158,197 was recorded to gain on extinguishment of derivative liability for the exchange of the Series G warrants and Series H warrants to 2,019 shares of common stock with a fair value of $49,278.

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 March 31, 2024 and 2023, 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:

	March 31, 2024	March 31, 2023
Stock options	88,275	104,325
Stock warrants	26,724,240	847,021
Convertible notes payable	754,744	721,790
Total	27,567,259	1,673,136

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 recent wars in Ukraine and Israel/Gaza, will impact the global economy and the Company is uncertain and cannot be reasonably measured.

2. INVENTORIES

Inventories consist of the following:

	March 31, 2024	September 30, 2023
Finished Goods	$ 65,980	$ 40,969
Goods-in-Process	1,263,613	1,323,535
Total	$ 1,329,593	$ 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. Once inventory has been written down, it creates a new cost basis for inventory that may not be subsequently written up. For the periods ended March 31, 2024 and 2023, the Company did not record any write-down of inventories.

3. WARRANT DERIVATIVE LIABILITY

As of March 31, 2024 and September 30, 2023, there are no financial 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 at each reporting period.

During the three months ended March 31, 2023, the Company issued 12,019 shares of common stock with a fair value of $49,278 in exchange for the cancellation of the Series G and Series H warrants. As a result, during the three month ended March 31, 2023, the Company recorded a gain of $ 1,158,197 to account for the extinguishment of derivative liability.

4. CONVERTIBLE NOTES PAYABLE, SENIOR SECURED

	March 31, 2024	September 30, 2023
Senior Secured Convertible Promissory Notes (the "2022 Notes")	$ 4,211,720	$ 4,230,000
Unamortized debt discount	-	(710,897)
Net Balance	**$ 4,211,720**	**$ 3,519,103**

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 on June 30, 2024, as amended, 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 April 30, 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 was amortized over the term of the notes using the effective interest rate method.

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.

On December 26, 2023, the Company issued a total of 2,000 shares of Common Stock in partial satisfaction of the outstanding Senior Secured Convertible Promissory Notes with the principal balance of $18,280.

On February 14, 2024, the Company entered into an amendment to the 2022 Notes, under which 95% of the principal amount of the Notes shall automatically convert, upon the closing of an Uplist Transaction, as defined, with a conversion price of $0.50 per share, into pre-funded warrants with an exercise price of $0.000125 per share, exercisable immediately. In addition, the note holder shall receive a warrant to purchase 80 times the dollar amount of the notes that are converted, with an exercise price per share of $0.50. There is no impact to the amendment until the Uplist transaction is completed.

During the three and six months ended March 31, 2024, the Company amortized debt discount of $46,965 and $710,897, respectively. As of March 31, 2024, the outstanding balance of the 2022 Notes payable amounted to $4,211,720 and no unamortized debt discount was remaining. On April 30, 2024, the convertible notes payable was amended in order to extend the maturity date to June 30, 2024. There were no compensation provided to the note holder nor any changes in the other terms of the notes payable.

5. CONVERTIBLE NOTES PAYABLE, UNSECURED

	March 31, 2024	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
Fourth closing notes (March, 2024)	648,000	-
Total	2,686,501	2,038,501
Unamortized debt discount	-	(379,799)
Net balance	**$** 2,686,501	**$** 1,658,702

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 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 June 30, 2024, as amended, and are convertible into shares of the Company's common stock at a conversion price of $9.14 per share. At March 31, 2024 and September 30, 2023, there was no unamortized discount for the Exchanged Notes.

Second Closing Notes (January 2023)

In January 2023, the Company issued 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, matures on June 30, 2024, as amended, 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 127,968 warrants to purchase shares of common stock and 9,598 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 and the relative fair value of the 9,598 shares of common stock to be $26,000. The Company also issued 6,565 placement agent warrants to purchase shares of the Company's common stock. 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. Furthermore, the Company also incurred direct legal and professional fees of $31,000 as part of this offering.

On February 14, 2024, the Company entered into an amendment to the Second Closing Notes, under which 95% of the principal amount of the Notes shall automatically convert, upon the closing of an Uplist Transaction, as defined, with a conversion price of $0.50 per share, into pre-funded warrants with an exercise price of $0.000125 per share, exercisable immediately. In addition, the note holder shall receive a warrant to purchase 80 times the dollar amount of the notes that are converted, with an exercise price per share of $0.50.

Third Closing Notes (March, April and May 2023)

In March, April and May 2023, the Company issued 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, and. The notes are unsecured, bear interest at a rate of 10% per annum, matures on June 30, 2024, as amended, 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 141,396 warrants to purchase shares of common stock and 10,608 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 $164,000, and the relative fair value of the 10,608 shares of common stock to be $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.

On February 14, 2024, the Company entered into an amendment to the Third Closing Notes, under which 95% of the principal amount of the Notes shall automatically convert, upon the closing of an Uplist Transaction, as defined, with a conversion price of $0.50 per share, into pre-funded warrants with an exercise price of $0.000125 per share, exercisable immediately. In addition, the note holder shall receive a warrant to purchase 80 times the dollar amount of the notes that are converted, with an exercise price per share of $0.50.

Fourth Closing Notes (March 2024)

On March 12, 2024, investors agreed to purchase Unsecured Convertible Promissory Notes (the "Fourth Closing Notes") in the aggregate principal amount of $648,000 in exchange for cash proceeds of $450,000, net of an OID of $198,000. The notes are unsecured, bears interest at a rate of 10% per annum, and matures June 30, 2024, as amended, 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 Fourth Closing Notes, the Company granted the Fourth Closing Notes noteholders 130,383 warrants to purchase shares of common stock and 9,782 pre-funded warrants. The warrants are fully vested, exercisable at $9.94 per share, and expire in 5 years, and prefunded warrants have similar terms, however, are exercisable at $0.001 per share. The Company determined the relative fair value of the warrants and pre-funded warrants to be approximately $148,891.

On February 14, 2024, the Company entered into an amendment to the Fourth Closing Notes, under which 95% of the principal amount of the Notes shall automatically convert, upon the closing of an Uplist Transaction, as defined, with a conversion price of $0.50 per share, into pre-funded warrants with an exercise price of $0.000125 per share, exercisable immediately. In addition, the note holder shall receive a warrant to purchase 80 times the dollar amount of the notes that are converted, with an exercise price per share of $0.50.

6. CONVERTIBLE NOTES PAYABLE, SERIES 2

	March 31, 2024	September 30, 2023
Series 2 Convertible Notes (converted in November 2023)	$ -	$ 450,000

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. 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

In January 2024 certain shareholders of the Company exchanged a total of 300,000 shares of Company's Common Stock for 300,073 of pre-funded warrants to purchase shares of Common Stock. At the date of the exchange, the fair value of the common stock received approximates the fair value of the warrants issued. The pre-funded warrants are fully vested, exercisable at $0.001 per share, and expire in 5 years.

2013 Stock Incentive Plan

On September 1, 2023, a majority of shareholders approved the 2023 Stock Plan with 455,169 common shares reserved to be issued under the plan. As of March 31, 2024, there were no issuances under the new plan.

On June 18, 2013, the Company established the 2013 Stock Incentive Plan (the "*2013 Plan*"). Under the 2013 Plan, the Company can issue or grant a total of 185,571 shares, as amended. On June 18, 2023, the 2013 Stock Incentive Plan expired, and no shares are available for grants under the 2013 Plan.

Common Stock Options

Stock compensation activity under the 2013 Plan for the six months ended March 31, 2024 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	5.58	$ -
Awarded	-	-	-	-
Forfeited/Cancelled	(1,825)	(67.00)	-	-
Outstanding at December 31, 2023	100,300	38.00	4.00	11,000
Awarded	-	-	-	-
Forfeited/Cancelled	(12,025)	(58.00)	-	-
Outstanding at March 31, 2024	88,275	$ 35.00	5.00	-
Vested at March 31, 2024	74,769	$ 39.00	3.50	-
Vested and expected to vest at March 31, 2024	88,275	$ 35.00	5.00	-

During the six months ended March 31, 2024 and 2023, the Company recorded stock compensation expense of $25,909 and $172,550 to account the fair value of the stock options that vested.

As of March 31, 2024, there is approximately $45,000 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 1.34 years.

Restricted Stock

For the three months ended March 31, 2024 and 2023, compensation expense recorded for the restricted stock awards was approximately $0 and $1,000, respectively. For the six months ended March 31, 2024 and 2023, compensation expense recorded for the restricted stock awards was approximately $0 and $3,000, respectively.

As of March 31, 2023, there was no unrecognized compensation expense related to unvested stock-based compensation arrangements granted under the 2013 Plan.

8. SHAREHOLDER ADVANCES RELATED TO BRIDGE FINANCING

During the period ended March 31, 2024, the Company received $1,125,000 in shareholder advances provided as a partial prepayment of securities to be issued pursuant to a Securities Purchase Agreement dated November 8, 2023 (the "PIPE SPA"). If the transaction underlying the PIPE SPA, with respect to $1,000,000 of these advances, was not consummated by March 31, 2024, as amended, the Company would be obligated to repay all of the advances within three business days thereafter, provided, however, that in lieu of repayment each investor may in its sole discretion elect to receive, by notice to the Company, prefunded warrants and common warrants in lieu of repayment as if the PIPE SPA transaction had closed. If the transaction underlying the PIPE SPA, with respect to $125,000 of these advances, was not consummated by April 30, 2024, as amended, the Company would be obligated to repay all of the advances within three business days thereafter, provided, however, that in lieu of repayment each investor may in its sole discretion elect to receive, by notice to the Company, prefunded warrants and common warrants in lieu of repayment as if the PIPE SPA transaction had closed.

With respect to $1,000,000 of the above referenced shareholder advances, if the Company's Common Stock had not been approved to be listed on a qualifying national exchange by April 2, 2024, as amended, then the amount of prefunded warrants and common warrants that would otherwise be issuable in connection with the PIPE SPA specific to those advances shall be increased by twenty-five percent. With respect to $125,000 of the above referenced shareholder advances, if the Company's Common Stock had not been approved to be listed on a qualifying national exchange by May 2, 2024, as amended, then the amount of prefunded warrants and common warrants that would otherwise be issuable in connection with the PIPE SPA specific to those advances shall be increased by twenty-five percent.

As of May 9, 2024, the Company had not been approved to be listed on a qualifying national exchange, had not repaid any advances, and had not received notice from any investors to receive pre-funded warrants and common warrants in lieu of prepayment.

9. SUBSEQUENT EVENTS

From April 1, 2024 through April 3, 2024, the Company raised an additional $125,000 from three investors in the form of shareholder advances provided as a partial prepayment of each investor's purchase price set forth on their respective signature pages to the PIPE SPA. If the transaction underlying the PIPE SPA, with respect to these advances, was not consummated by April 30, 2024, as amended, the Company would be obligated to repay all of the advances within three business days thereafter, provided, however, that in lieu of repayment each investor may in its sole discretion elect to receive, by notice to the Company, prefunded warrants and common warrants in lieu of repayment as if the PIPE SPA transaction had closed.

With respect to the $125,000 of the above referenced shareholder advances received in April 2024, if the Company's Common Stock had not been approved to be listed on a qualifying national exchange by May 2, 2024, as amended, then the amount of prefunded warrants and common warrants that would otherwise be issuable in connection with the PIPE SPA specific to these advances shall be increased by twenty-five percent.

As of May 9, 2024, the Company had not been approved to be listed on a qualifying national exchange, had not repaid any advances, and had not received notice from any investors to receive pre-funded warrants and common warrants in lieu of prepayment.

From April 12, 2024 through May 1, 2024, the Company raised an additional $600,000 in shareholder advances from five investors. Such amounts are expected to be exchanged into a new senior secured note with 20% OID. Upon closing, all prior shareholder advances are expected to be applied toward or exchanged into the new senior note with a maturity date of June 30, 2024.

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 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 external 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 proprietary 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 tissue and self-assemble (i.e., self-build) 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 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 May 1, 2024, our current cash on hand will meet our anticipated cash requirements into the third 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 amendment (“Amendment No. 14 to the First Notes”) with the holders of the Company’s outstanding 2022 Notes, as amended on February 14, 2023, March 10, 2023, March 15, 2023, April 15, 2023, May 15, 2023, June 15, 2023, July 1, 2023, July 7, 2023, July 31, 2023, August 30, 2023, September 30, 2023, October 31, 2023, and November 15, 2023 issued in connection with the First Closing. On January 5, 2024, the Company also entered into an amendment (“Amendment No. 14 to the Second Notes”) with the holders of the Company’s outstanding Second Notes, as amended on February 14, 2023, March 10, 2023, March 15, 2023, April 15, 2023, May 15, 2023, June 15, 2023, July 1, 2023, July 7, 2023, July 31, 2023, August 30, 2023, September 30, 2023, October 31, 2023, and November 15, 2023 issued in connection with the Second Closing. On January 5, 2024, the Company also entered into an amendment (“Amendment No. 9 to the Third Notes” and, together with Amendment No. 14 to the First Notes and Amendment No. 14 to the Second Notes, the “Amendments to the 2022 Notes”) with the holders of the Company’s outstanding Third Notes, as amended on June 15, 2023, July 1, 2023, July 7, 2023, July 31, 2023, August 30, 2023, September 30, 2023, October 31, 2023, and November 15, 2023 issued in connection with the Third Closing. Under the Amendments to the 2022 Notes, the Second Notes and the Third Notes were amended to extend the date of the completion of an uplist to any of the Nasdaq Global Market, Nasdaq Capital Market, New York Stock Exchange, or NYSE American (such transaction, an “Uplist Transaction”) and to extend the respective maturity date of each of the 2022 Notes from January 6, 2024, to March 15, 2024.

As a result of the entry into the Amendments to the 2022 Notes, and pursuant to the terms of the Company’s outstanding Exchanged Notes, the Exchanged Notes were automatically amended to extend the date of completion of an Uplist Transaction from January 6, 2024, to March 15, 2024.

On March 12, 2024, the Company entered into Amendment No. 3 to the SPA (the “Third Amendment”) with certain Investors in connection with the fourth closing of the Convertible Notes Offering for the issuance and sale by the Company to such Investors of an aggregate of (i) Unsecured Convertible Promissory Notes (the “Fourth Notes”) in the aggregate principal amount of $648,000, which includes an aggregate $198,000 original issue discount in respect of the Fourth Notes; (ii) Warrants (the “Fourth Warrants”) to purchase an aggregate of 130,383 shares (the “Warrant Shares”) of Common Stock; and (iii) 9,779 shares of Common Stock (the “Inducement Shares”). The aggregate net proceeds for the sale of the Fourth Notes, Fourth Warrants and Inducement Shares was approximately $450,000, after deducting issuance discounts. The fourth closing of the sales of these securities under the Amended SPA occurred on March 12, 2024 (the “Fourth Closing Date”). On March 18, 2024, effective March 15, 2024, the Company entered into Amendment No. 1 to the Fourth Notes, as described in detail below, to modify the terms of the Uplist Transaction (as defined below) repayment provision and extend the date for completion of the Uplist Transaction. In connection with the issuance of the Fourth Notes and in lieu of issuing 9,779 Inducement Shares, the Company issued the investor 9,782 pre-funded warrants with an exercise price of $0.001 per share.

The Company intends to use the net proceeds from the Convertible Notes Offering primarily for working capital and general corporate purposes, and has not allocated specific amounts for any specific purposes.

The Fourth Notes become due and payable on March 15, 2024 and may not be prepaid, in whole or in part, at any time except with the written consent of the lead investor, with such prepayment amounts subject to adjustment as a result of certain time-based prepayment premiums set forth in the Fourth Notes; provided, that, the written consent of the lead investor is not required in connection with a prepayment made from the proceeds of an Uplist Transaction (as defined below). The Fourth Notes bear interest on the unpaid principal balance at a rate equal to ten percent (10%) (computed on the basis of the actual number of days elapsed in a 360-day year) per annum accruing from the Fourth Closing Date until the Fourth Notes become due and payable at maturity or upon their conversion, acceleration or by prepayment, and may become due and payable upon the occurrence of an event of default under the Fourth Notes. Any amount of principal or interest on the Fourth Notes which is not paid when due shall bear interest at the rate of the lesser of (i) eighteen percent (18%) per annum or (ii) the maximum amount allowed by law from the due date thereof until payment in full

The Fourth Notes are convertible into an aggregate of 65,191 shares of Common Stock at the option of each holder of the Fourth Notes from the Fourth Closing Date at the Conversion Price through the later of (i) the Maturity Date and (ii) the date of payment of the Default Amount (as defined in the Fourth Note); provided, however, certain Fourth Notes include a provision preventing such conversion if, as a result, the holder, together with its affiliates and any other persons whose beneficial ownership of Company Common Stock would be aggregated with the holder's, would be deemed to beneficially own more than 4.99% of the outstanding shares of the Company's Common Stock immediately after giving effect to the Conversion; and provided further, the holder, upon notice to the Company, may increase or decrease the Notes Ownership Limitation; provided that (i) the Notes Ownership Limitation may only be increased to a maximum of 9.99% of the outstanding shares of the Company's Common Stock; and (ii) any increase in the Notes Ownership Limitation will not become effective until the 61st day after delivery of such waiver notice. The initial conversion price of the Fourth Notes (the "Conversion Price") shall be equal to $9.14 and may be reduced or increased proportionately as a result of any stock dividends, recapitalizations, reorganizations, and similar transactions. If the Company fails to deliver the shares of Common Stock issuable upon a conversion by the Deadline (as defined in the Fourth Notes), then the Company is obligated to pay such Fourth Note holder $5,000 per day in cash for each day beyond the Deadline. The Fourth Warrants (i) have an exercise price of $9.94 per share; (ii) have a term of exercise equal to 5 years after their issuance date; (iii) are exercisable immediately after their issuance; and (iv) have a provision preventing the exercisability of such Fourth Warrant if, as a result of the exercise of the Fourth Warrant, the holder, together with its affiliates and any other persons whose beneficial ownership of Company Common Stock would be aggregated with the holder's, would be deemed to beneficially own more than either 4.99% or 9.99% of the outstanding shares of the Company's Common Stock. On March 12, 2024, we entered into an amendment (the "Third A&R Registration Rights Agreement") to that certain Second Amended and Restated Registration Rights Agreement, dated as of May 15, 2023, by and among us and certain institutional and accredited individual investors, as amended (the "A&R Registration Rights Agreement"). Under the Third A&R Registration Rights Agreement, the A&R Registration Rights Agreement was amended to obligate us to file with the SEC a registration statement covering the resale of the securities issued on the Fourth Closing Date.

On March 18, 2024, with effectiveness as of March 15, 2024, the Company entered into an amendment ("Amendment No. 15 to the First Notes") with the holders of the Company's outstanding Senior Secured Convertible Promissory Notes, as separately amended on February 14, 2023, March 10, 2023, March 15, 2023, April 15, 2023, May 15, 2023, June 15, 2023, July 1, 2023, July 7, 2023, July 31, 2023, August 30, 2023, September 30, 2023, October 31, 2023, November 15, 2023 and January 5, 2024 (as amended, the "First Notes"), issued in connection with a private placement financing the Company completed on July 6, 2022. On March 18, 2024, with effectiveness as of March 15, 2024, the Company also entered into an amendment ("Amendment No. 15 to the Second Notes") with the holders of the Company's outstanding Unsecured Convertible Promissory Notes, as separately amended on February 14, 2023, March 10, 2023, March 15, 2023, April 15, 2023, May 15, 2023, June 15, 2023, July 1, 2023, July 7, 2023, July 31, 2023, August 30, 2023, September 30, 2023, October 31, 2023, November 15, 2023 and January 5, 2024 (as amended, the "Second Notes"), issued in connection with a private placement financing the Company completed on January 18, 2023. On March 18, 2024, with effectiveness as of March 15, 2024, the Company also entered into an amendment ("Amendment No. 10 to the Third Notes") with the holders of the Company's outstanding Unsecured Convertible Promissory Notes, as separately amended on June 15, 2023, July 1, 2023, July 7, 2023, July 31, 2023, August 30, 2023, September 30, 2023, October 31, 2023, November 15, 2023 and January 5, 2024 (as amended, the "Third Notes"), issued in connection with a private placement financing the Company completed on May 15, 2023. On March 18, 2024, with effectiveness as of March 15, 2024, the Company also entered into an amendment ("Amendment No. 1 to the Fourth Notes") with the holders of the Company's outstanding Senior Secured Convertible Promissory Notes, issued in connection with a private placement financing the Company completed on March 12, 2024 (as amended, the "Fourth Notes" and, together with the First Notes, Second Notes, and Third Notes, the "Notes").

Under the amendments to the Notes, the following amendments will be simultaneously effective upon the closing of the Uplist Transaction. 95% of the then outstanding principal amount of the Notes shall automatically convert (the "Automatic Conversion") into shares of Common Stock, with the conversion price for purposes of such Automatic Conversion being $0.50 (or $4.00 giving effect to the anticipated reverse stock split). Upon the Automatic Conversion and to the extent that the beneficial ownership of a holder of Notes (a "Holder" and, all holders of Notes together, the "Holders") would increase over the applicable Notes Ownership Limitation, the Holder will receive pre-funded warrants (the "Note Conversion Pre-Funded Warrants", and the shares issuable upon exercise thereof, the "Note Conversion Pre-Funded Warrant Shares") in lieu of shares of Common Stock otherwise issuable to the Holder in connection with the Automatic Conversion, which Note Conversion Pre-Funded Warrants shall have an exercise price of $0.000125 per share (or $0.001 giving effect to the anticipated reverse stock split), may be exercised on a cashless basis, shall be exercisable immediately upon issuance and shall contain a customary beneficial ownership limitation provision. Additionally, under the amendments to the Notes, the Uplist Transaction completion date and the Maturity Date (as defined in the Notes) were modified to April 30, 2024.

On April 30, 2024, certain terms of these agreements, such as the maturity date and uplist date were amended to June 30, 2024. There was no compensation provided to the note holder nor any changes in the other terms of the notes payable.

In addition, upon the Automatic Conversion, the Holder shall receive a warrant (the "Uplist Conversion Warrant", and the shares issuable upon exercise thereof, to purchase a number of shares of Common Stock equal to 80 (or 10 giving effect to the anticipated reverse stock split) times the dollar amount under the Notes that was converted in the Automatic Conversion. The Uplist Conversion Warrant shall have an exercise price per share of $0.50 (or $4.00 giving effect to the anticipated reverse stock split) and shall otherwise be identical to the warrants being issued to the investors under the Purchase Agreement dated November 8, 2023.

On March 28, 2024, certain purchaser parties (the "Advancing Purchasers") to the previously disclosed Securities Purchase Agreement (the "SPA") dated November 8, 2023, among Arch Therapeutics, Inc. (the "Company") and the purchasers party thereto, advanced the Company an aggregate of $250,000 (the "Advance"), which Advance is being treated as partial prepayment of the purchase price for the Advancing Purchasers under the SPA.

The Advance included the following terms: (i) if the Closing (as defined in the SPA) does not occur on or before April 30, 2024, the Advancing Purchasers shall have the option, in lieu of being repaid the Advance, to purchase (A) pre-funded warrants to purchase up to an aggregate of 484,963 shares of the Company's common stock, par value $0.001 per share (the "Common Stock") (using the SPA pre-funded warrant purchase price of $0.5155 per pre-funded warrant) and (B) common warrants to purchase up to an aggregate of 484,963 shares of Common Stock (using the 100% warrant coverage provided in the SPA), in satisfaction of the Company's obligation to repay the Advance to the Advancing Purchasers and (ii) if the Common Stock has not been approved by Nasdaq for listing on Nasdaq Capital Market by April 30, 2024, then by no later than May 2, 2024, the Company shall issue to the Advancing Purchasers (A) additional prefunded warrants to purchase up to an aggregate of 121,240 shares of Common Stock (which represents a 25% addition) and (B) additional common warrants to purchase up to an aggregate of 121,240 shares of Common Stock. As of May 9, 2024, the Company has not repaid any advances, nor has it received notice from any investors to receive pre-funded warrants and common warrants in lieu of prepayment.

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 March 31, 2024 Compared to Three Months Ended March 31, 2023

	March 31, 2024	March 31, 2023	Increase (Decrease) $
Revenue	$ 31,866	$ 16,654	15,212
Operating expenses:			
Cost of revenues	21,555	18,718	2,837
Selling, general and administrative	683,184	1,252,786	(569,602)
Research and development	203,869	170,634	33,235
Loss from operations	(876,742)	(1,425,484)	548,742
Other (Expense) Income	(592,397)	523,007	(1,115,404)
Net loss	$ (1,469,139)	$ (902,477)	(566,662)

Revenue

Revenue for the three months ended March 31, 2024 was $31,866, an increase of $15,212 compared to revenue of $16,654 for the three months ended March 31, 2023. Revenue for the three months ended March 31, 2024, was primarily the result of 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, as well as transactions into a single hospital. Revenue for the three months ended March 31, 2023 was the result of transactions into VA Hospitals through our distribution partner, Lovell Government Services ("LGS"), as well as transactions into a single hospital.

Cost of Revenues

Cost of revenue for the three months ended March 31, 2024 was $21,555, an increase of $2,837 compared to cost of revenue of $18,718 for the three months ended March 31, 2023. The increase in cost of revenue corresponds with the increase in revenues and includes product costs, third party warehousing, overhead allocation, royalty and shipping costs.

Selling, General and Administrative Expense

Selling, general and administrative expense for the three months ended March 31, 2024 was $683,184, a decrease of $569,602, compared to $1,252,786 for the three months ended March 31, 2023. The decrease in selling, general and administrative expense for the three months ended March 31, 2024 is primarily due to a decrease in legal expenses as well as a decrease in payroll costs.

Research and Development Expense

Research and development expense for the three months ended March 31, 2024 was $203,869, an increase of $33,235, compared to $170,634 for the three months ended March 31, 2023. The increase in research and development expense is primarily attributable to an increase in research consultants and advisor's expense.

Other (Expense) Income

Other expense during the three months ended March 31, 2024 was $592,397, an increase of $1,115,404, compared to other income of $523,007 for the three months ended March 31, 2023. The increase in other expense is primarily attributable to the gain on extinguishment of derivative liabilities that was recognized during the three months ended March 31, 2023 of approximately $1,200,000 income with no similar gain recognized in the current period.

Six Months Ended March 31, 2024 Compared to Six Months Ended March 31, 2023

	March 31, 2024	March 31, 2023	Increase (Decrease) $
Revenue	$ 77,733	$ 22,914	54,819
Operating expenses:			
Cost of revenues	45,161	36,353	8,808
Selling, general and administrative	1,994,534	2,355,701	(361,167)
Research and development	409,449	332,087	77,362
Loss from operations	(2,371,411)	(2,701,227)	329,816
Other Expense	(1,779,380)	(1,306)	(1,778,074)
Net loss	$ (4,150,791)	$ (2,702,533)	(1,448,258)

Revenue

Revenue for the six months ended March 31, 2024 was $77,733 an increase of $54,819 compared to revenue of $22,914 for the six months ended March 31, 2023. Revenue for the six months ended March 31, 2024 was the result of several transactions into a single hospital, 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 six months ended March 31, 2024 was $45,161, an increase of $8,808, compared to cost of revenue of $36,353 for the six months ended March 31, 2023. The increase in cost of revenues corresponds to the increase in revenues. Cost of revenue includes product costs, third party warehousing, overhead allocation, royalty and shipping costs. An increase in revenue for the six months ended March 31, 2024 led to higher cost of revenues as a result.

Selling, General and Administrative Expense

Selling, general and administrative expense during the six months ended March 31, 2024 was $1,994,534, a decrease of $361,168, compared to $2,355,701 for the six months ended March 31, 2023. The decrease in selling, general and administrative expense for the six months ended March 31, 2024 is primarily attributable to a decrease in professional service costs, most notably legal costs related to financing activities.

Research and Development Expense

Research and development expense during the six months ended March 31, 2024 was $409,449, an increase of $77,362, compared to $332,087 for the six months ended March 31, 2023. The increase in research and development expense is primarily attributable to an increase in payroll costs.

Other (Expense) Income

Other expense during the six months ended March 31, 2024 was $1,779,380, an increase of $1,778,074, compared to other expense of $1,306 for the six months ended March 31, 2023. 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, Third, and Fourth Notes as well as increase in related interest expense. Additionally, the increase in other expense is primarily attributable to the gain on extinguishment of derivative liabilities that was recognized during the six months ended March 31, 2023 of approximately $1,200,000 income and did not occur during the six months ended March 31, 2024.

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 March 31, 2024, we had total current assets of $1,533,177 (including cash of $26,426) and a working capital deficit of $10,902,654. Our working capital as of March 31, 2024 and September 30, 2023 are summarized as follows:

	March 31, 2024	September 30, 2023
Total Current Assets	$ 1,533,177	$ 1,950,090
Total Current Liabilities	12,417,551	9,465,921
Working Capital Deficit	$ (10,884,374)	$ (7,515,831)

Total current assets as of March 31, 2024 were $1,533,177, a decrease of $416,913, 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 March 31, 2024 and September 30, 2023 were comprised primarily of cash, inventory and prepaid expenses and other current assets.

Total current liabilities as of March 31, 2024 were $12,417,557, an increase of $2,951,630, compared to $9,465,921 as of September 30, 2023. The increase is primarily due to an increase in shareholder advances and accounts payable, new notes issued during the period, 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 conversion of the Series 2 and certain Senior Secured convertible note into shares.

Cash Flow for the Six Months Ended March 31, 2024 Compared to the Six Months Ended March 31, 2023

	March 31, 2024	March 31, 2023
Cash Used in Operating Activities	$ (1,562,764)	$ (1,249,931)
Cash Provided by Financing Activities	1,366,470	532,486
Net decrease in Cash	$ (196,294)	$ (717,445)

Cash Used in Operating Activities

Cash used in operating activities increased by $312,833 to $1,562,764 during the six months ended March 31, 2024, compared to $1,249,931 during the six months ended March 31, 2023. The increase in cash used in operating activities is primarily attributable to an increase in net loss partially offset by an increase in non-cash accretion of debt discounts and issuance costs on convertible notes payable.

Cash Provided by Financing Activities

Cash provided by financing activities increased by $833,984 to $1,366,470 during the six months ended March 31, 2024, compared to $532,486 cash used in financing activities during the six months ended March 31, 2023. For the six months ended March 31, 2024, the increase in cash provided by financing activities was attributable to an increase in Shareholder and third-party advances related to bridge financing.

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 and 2023 SPA 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 March 31, 2024, 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.

Off-Balance Sheet Arrangements

We have no significant off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to stockholders.

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 March 31, 2024, 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 March 31, 2024 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 Fourth Warrant		8-K	4.1	24759430	3/18/23
10.2	Form of Amendment No. 3 to Securities Purchase Agreement		8-K	10.1	24759430	3/18/23
10.3	Form of Third A&R Registration Rights Agreement		8-K	10.2	24759430	3/18/23
10.4	Form of Fourth Note		8-K	10.3	24759430	3/18/23
10.5	Form of Amendment No. 15 to the First Notes		8-K	10.4	24759430	3/18/23
10.6	Form of Amendment No. 15 to the Second Notes		8-K	10.5	24759430	3/18/23
10.7	Form of Amendment No. 10 to the Third Notes		8-K	10.6	24759430	3/18/23
10.8	Form of Amendment No. 1 to the Fourth Notes		8-K	10.7	24759430	3/18/23
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)					

* Filed herewith.

** Furnished herewith.

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: May 9, 2024

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

Date: May 9, 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: May 9, 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: May 9, 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 March 31, 2024 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: May 9, 2024

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

Date: May 9, 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.