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, 2023

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

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

Commission File Number: **000-54986**

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

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

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

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

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

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

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

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

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

Accelerated filer ☐
Smaller reporting company ☒

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

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

As of May 22, 2023, 1,285,213 shares of the registrant's common stock were outstanding.

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

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Arch Therapeutics, Inc. and Subsidiary
Consolidated Balance Sheets
As of March 31, 2023 (Unaudited) and September 30, 2022

	March 31, 2023	September 30, 2022
ASSETS		
Current assets:		
Cash	$ 29,495	$ 746,940
Inventory	1,402,384	1,414,848
Prepaid expenses and other current assets	156,349	436,407
Total current assets	1,588,228	2,598,195
Long-term assets:		
Property and equipment, net	1,001	2,044
Other assets	3,500	3,500
Total long-term assets	4,501	5,544
Total assets	$ 1,592,729	$ 2,603,739
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 2,425,894	$ 1,328,000
Shareholder advances	230,000	-
Accrued expenses and other liabilities	205,792	318,505
Insurance premium financing	35,419	247,933
Current Portion of Series 2 convertible note	550,000	550,000
Current Portion of Series 1 convertible note	450,000	-
Current Portion of Unsecured convertible notes	981,317	-
Current Portion of 2022 Notes	2,454,683	-
Current Portion of Accrued Interest	645,712	127,781
Current portion of derivative liability	-	748,275
Total current liabilities	7,978,817	3,320,494
Long-term liabilities:		
Unsecured convertible notes	-	699,781
Series 2 convertible notes	-	450,000
2022 Notes	-	1,662,492
Accrued interest	-	204,575
Derivative liability	-	459,200
Total long-term liabilities	-	3,476,048
Total liabilities	7,978,817	6,796,542
Commitments and contingencies		
Stockholders' deficit:		
Common stock, $0.001 par value, 12,000,000 and 4,000,000 shares authorized as of March 31, 2023 and September 30, 2022, 1,274,605 and 1,252,665 shares issued as of March 31, 2023 and September 30, 2022 and1,274,605 and 1,249,432 shares outstanding as of March 31, 2023 and September 30, 2022	1,275	1,252
Additional paid-in capital	51,387,943	50,878,718
Accumulated deficit	(57,775,306)	(55,072,773)
Total stockholders' deficit	(6,386,088)	(4,192,803)
Total liabilities and stockholders' deficit	$ 1,592,729	$ 2,603,739

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

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

	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022	Six Months Ended March 31, 2023	Six Months Ended March 31, 2022
Revenue	$ 16,654	$ 3,130	$ 22,914	$ 7,826
Operating expenses:				
Cost of revenues	18,718	17,430	36,353	34,223
Selling, general and administrative expenses	1,252,786	1,208,910	2,355,701	2,472,013
Research and development expenses	170,634	527,656	332,087	762,274
Total costs and expenses	1,442,138	1,753,996	2,724,141	3,268,510
Loss from operations	(1,425,484)	(1,750,866)	(2,701,227)	(3,260,684)
Other income (expense):				
Interest expense	(635,190)	(39,452)	(1,159,503)	(79,781)
Gain on extinguishment of derivative liabilities	1,158,197	-	1,158,197	-
Expiration of derivative liability/Series F warrant	-	1,000,000	-	1,000,000
Total other income (expense)	523,007	960,548	(1,306)	920,219
Net loss	$ (902,477)	$ (790,318)	$ (2,702,533)	$ (2,340,465)
Loss per share - basic and diluted				
Net loss per common share - basic and diluted	$ (0.71)	$ (0.67)	$ (2.15)	$ (1.98)
Weighted common shares - basic and diluted	1,263,437	1,184,328	1,255,373	1,184,030

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

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

Three Months Ended March 31, 2023	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
Balance at December 31, 2022	1,252,665	$ 1,252	$ 50,982,744	$ (56,872,829)	(5,888,833)
Net loss	-	-	-	(902,477)	(902,477)
Vesting of restricted stock	250	-	-	-	-
Stock-based compensation expense	-	-	68,524	-	68,524
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
Balance at March 31, 2023	1,274,532	$ 1,275	$ 51,387,943	$ (57,775,306)	$ (6,386,088)

Six Months Ended March 31, 2023	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
Balance at September 30, 2022	1,252,665	$ 1,252	$ 50,878,718	$ (55,072,773)	(4,192,803)
Net loss	-	-	-	(2,702,533)	(2,702,533)
Vesting of restricted stock	250	-	-	-	-
Stock-based compensation expense	-	-	172,550	-	172,550
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
Balance at March 31, 2023	1,274,532	$ 1,275	$ 51,387,943	$ (57,775,306)	$ (6,386,088)

Three Months Ended March 31, 2022	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
Balance at December 31, 2021	1,183,974	$ 1,184	$ 48,922,204	$ (51,347,066)	$ (2,423,678)
Net loss	-	-	-	(790,318)	(790,318)
Vesting of restricted stock	625	1	(1)	-	-
Stock-based compensation expense	-	-	154,572	-	154,572
Balance at March 31, 2022	1,184,599	$ 1,185	$ 49,076,775	$ (52,137,384)	$ (3,059,424)

Six Months Ended March 31, 2022	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
Balance at September 30, 2021	1,183,599	$ 1,184	$ 48,770,061	$ (49,796,919)	$ (1,025,674)
Net loss	-	-	-	(2,340,465)	(2,340,465)
Vesting of restricted stock	1,000	1	(1)	-	-
Stock-based compensation expense	-	-	306,715	-	306,715
Balance at March 31, 2022	1,184,599	$ 1,185	$ 49,076,775	$ (52,137,384)	$ (3,059,424)

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

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

	Six Months Ended March 31, 2023	Six Months Ended March 31, 2022
Cash flows from operating activities:		
Net loss	$ (2,702,533)	$ (2,340,465)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation	1,043	1,598
Stock-based compensation	172,550	306,715
Decrease to fair value of derivative	-	(1,000,000)
Gain on extinguishment of derivative liabilities	(1,158,197)	-
Accretion of discount and debt issuance costs on 2022 Notes and Unsecured convertible notes	846,147	-
Inventory obsolescence charge	-	248,073
Changes in operating assets and liabilities:		
(Increase) decrease in:		
Inventory	12,464	(351,876)
Prepaid expenses and other current assets	280,058	127,080
Increase (decrease) in:		
Accounts payable	1,097,894	879,995
Accrued interest	313,356	79,781
Accrued expenses and other current liabilities	(112,713)	(163,135)
Net cash used in operating activities	(1,249,931)	(2,212,234)
Cash flows from financing activities:		
Repayment of insurance premium financing	(212,514)	-
Proceeds from shareholder advances	230,000	-
Proceeds from Unsecured convertible notes	515,000	-
Net cash provided by financing activities	532,486	-
Net decrease in cash	(717,445)	(2,212,234)
Cash, beginning of year	746,940	2,266,639
Cash, end of period	$ 29,495	$ 54,405
Non-cash financing activities:		
Exchange of Series G and Series H warrants for common stock	$ 49,278	$ -
Issuance of restricted stock	$ 3,019	$ 19,887
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 consolidated financial statements.

1. BASIS OF PRESENTATION AND DESCRIPTION OF BUSINESS

Organization and Description of Business

Arch Therapeutics, Inc. (together with its subsidiary, the "*Company*" or "*Arch*") was incorporated under the laws of the State of Nevada on September 16, 2009, under the name "Almah, Inc.". Effective June 26, 2013, the Company completed a merger (the "*Merger*") with Arch Biosurgery, Inc. (formerly known as Arch Therapeutics, Inc.), a Massachusetts corporation ("*ABS*"), and Arch Acquisition Corporation ("*Merger Sub*"), the Company's wholly owned subsidiary formed for the purpose of the transaction, pursuant to which Merger Sub merged with and into ABS and ABS thereby became the wholly owned subsidiary of the Company. As a result of the acquisition of ABS, the Company abandoned its prior business plan and changed its operations to the business of a biotechnology company. The Company's principal offices are located in Framingham, Massachusetts.

ABS was incorporated under the laws of the Commonwealth of Massachusetts on March 6, 2006, as Clear Nano Solutions, Inc. On April 7, 2008, ABS changed its name from Clear Nano Solutions, Inc. to Arch Therapeutics, Inc. Effective upon the closing of the Merger, ABS changed its name from Arch Therapeutics, Inc. to Arch Biosurgery, Inc.

In the first quarter of 2021, the Company commenced commercial sales of our first product, AC5® Advanced Wound System, and has devoted substantially all of the Company's operational effort to the research, development and regulatory programs necessary to turn the Company's core technology into commercial products. To date, the Company has principally raised capital through the issuance of convertible debt, and the issuance of units consisting of its 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 future 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 consolidated financial statements do not include any adjustments related to the recoverability of assets that might be necessary despite this uncertainty.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying unaudited interim consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America ("*US GAAP*"). The interim consolidated financial statements included herein are unaudited; however, they contain all normal recurring accruals and adjustments that, in the opinion of management, are necessary to present fairly the Company's results of operations and financial position for the interim periods.

Although the Company believes that the disclosures in these unaudited interim consolidated financial statements are adequate to make the information presented not misleading, certain information normally included in the footnotes prepared in accordance with US GAAP has been omitted as permitted by the rules and regulations of the Securities and Exchange Commission ("*SEC*"). These unaudited interim consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2022, filed with the SEC on December 28, 2022 (the "*Annual Report*").

For a complete summary of the Company's significant accounting policies, please refer to Note 2 included in Item 8 of the Company's Annual Report. There have been no material changes to the Company's significant accounting policies during the six months ended March 31, 2023.

Basis of Presentation

The 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.

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 1:200, effective January 17, 2023 (the "*Reverse Share Split*"). All information included in these consolidated financial statements has been adjusted, on a retrospective basis, to reflect the Reverse Share Split, unless otherwise stated. All outstanding securities entitling their holders to purchase shares of Common Stock or acquire shares of Common Stock, including stock options, restricted stock units, and warrants, were adjusted as a result of the Reverse Stock Split, as required by the terms of those securities.

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. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. The Company had no cash equivalents as of March 31, 2023 and September 30, 2022.

Inventories

Inventories are stated at the lower of cost or net realizable value. 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 cost of raw materials, goods-in-process and finished goods are determined on a First in First out (FiFo) basis. When determining net realizable value, appropriate consideration is given to obsolescence, excessive levels, deterioration, and other factors.

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.

Property and Equipment

Property and equipment are recorded at cost and depreciated using the straight-line method over the estimated useful life of the related asset. Upon sale or retirement, the cost and accumulated depreciation are eliminated from their respective accounts, and the resulting gain or loss is included in income or loss for the period. Repair and maintenance expenditures are charged to expense as incurred.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment when circumstances indicate the carrying value of an asset may not be recoverable in accordance with the Financial Accounting Standards Board ("*FASB*") Accounting Standards Codification ("*ASC*") Topic 360, *Property, Plant and Equipment*. For assets that are to be held and used, impairment is recognized when the estimated undiscounted cash flows associated with the asset or group of assets is less than their carrying value. If impairment exists, an adjustment is made to write the asset down to its fair value, and a loss is recorded as the difference between the carrying value and fair value. Fair values are determined based on quoted market values, discounted cash flows or internal and external appraisals, as applicable. Assets to be disposed of are carried at the lower of carrying value or estimated net realizable value. For the six months ended March 31, 2023 and 2022 there has not been any impairment of long-lived assets.

Leases

The Company determines if an arrangement is a lease at its inception. Operating lease right-of-use assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. The Company's lease does not provide an implicit interest rate, the Company used an incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Income Taxes

In accordance with FASB ASC Topic 740, *Income Taxes*, the Company recognizes deferred tax assets and liabilities for the expected future tax consequences or events that have been included in the Company's consolidated financial statements and/or tax returns. Deferred tax assets and liabilities are based upon the differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities and for loss and credit carryforwards using enacted tax rates expected to be in effect in the years in which the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

The Company provides reserves for potential payments of tax to various tax authorities related to uncertain tax positions when management determines that it is more likely than not that a loss will be incurred related to these matters and the amount of the loss is reasonably determinable.

Revenue

In accordance with FASB ASC Topic 606, *Revenue Recognition*, the Company recognizes revenue 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.

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 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 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 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, 2023 and September 30, 2022, the carrying amounts of cash, accounts payables and accrued expense and other liabilities approximate fair value because of their short-term nature. The carrying amounts for the Series Convertible Notes (See Note 12), 2022 Notes (see Note 11), and Second Notes (see Note 11) approximate fair value because borrowing rates and terms are similar to comparable market participants.

Derivative Liabilities

The Company accounts for its warrants and other derivative financial instruments as either equity or liabilities based upon the characteristics and provisions of each instrument, in accordance with FASB ASC Topic 815, *Derivatives and Hedging* ("*ASC 815*"). Warrants classified as equity are recorded at fair value as of the date of issuance on the Company's consolidated balance sheets and no further adjustments to their valuation are made. Warrants classified as derivative liabilities and other derivative financial instruments that require separate accounting as liabilities are recorded on the Company's consolidated balance sheets at their fair value on the date of issuance and will be revalued on each subsequent balance sheet date until such instruments are exercised or expire, with any changes in the fair value between reporting periods recorded as other income or expense. Management estimates the fair value of these liabilities using option pricing models and assumptions that are based on the individual characteristics of the warrants or instruments on the valuation date, as well as assumptions for future financings, expected volatility, expected life, yield, and risk-free interest rate. 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 and $49,278 was recorded as part of shareholder's deficit.

Complex Financial Instruments

The Company does not use derivative instruments to hedge exposures to cash flow, market, or foreign currency risks. The Company evaluates its financial instruments, including warrants, to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. The Company values its derivatives using the Black-Scholes option-pricing model or other acceptable valuation models, including Monte-Carlo simulations. Derivative instruments are valued at inception, upon events such as an exercise of the underlying financial instrument, and at subsequent reporting periods. The classification of derivative instruments, including whether such instruments should be recorded as liabilities, is re-assessed at the end of each reporting period.

The Company reviews the terms of debt instruments, equity instruments, and other financing arrangements to determine whether there are embedded derivative features, including embedded conversion options that are required to be bifurcated and accounted for separately as a derivative financial instrument. Additionally, in connection with the issuance of financing instruments, the Company may issue freestanding options and warrants, including options or warrants to non-employees in exchange for consulting or other services performed.

The Company accounts for its common stock warrants in accordance with Accounting Standards Codification ("ASC") 815,*Derivatives and Hedging* ("ASC 815"). Based upon the provisions of ASC 815, the Company accounts for common stock warrants as liabilities if the warrant requires net cash settlement or gives the holder the option of net cash settlement, or it fails the equity classification criteria. The Company accounts for common stock warrants as equity if the contract requires physical settlement or net physical settlement or if the Company has the option of physical settlement or net physical settlement and the warrants meet the requirements to be classified as equity. Common stock warrants classified as liabilities are initially recorded at fair value on the grant date and remeasured at fair value each balance sheet date with the offset adjustments recorded in change in fair value of warrant liability within the consolidated statements of operations. Common stock warrants classified as equity are initially measured at fair value on the grant date and are not subsequently remeasured.

Financial Statement Reclassification

Certain balances in the prior year consolidated financial statements have been reclassified for comparison purposes to conform to the presentation in the current period consolidated financial statements. During the three-month period ended March 31, 2023, the Company reclassified the carrying amount of Exchanged Notes of $699,781 (see Note 12) that were previously included in the 2022 Notes payable to Unsecured convertible notes.

Subsequent Events

The Company evaluated all events or transactions through May 22, 2023, the date which these consolidated financial statements were issued. See note 15 for matters deemed to be subsequent events.

Going Concern Basis of Accounting

As reflected in the consolidated financial statements, the Company has an accumulated deficit as of March 31, 2023, has suffered significant net losses and negative cash flows from operations, only recently commenced generating limited operating revenues, and has limited working capital. The continuation of the Company's business as a going concern is dependent upon raising additional capital, the ability to successfully market and sell its product and eventually attaining and maintaining profitable operations. In particular, as of March 31, 2023, the Company will be required to raise additional capital, obtain alternative means of financial support, or both, in order to continue to fund operations, and therefore there is substantial doubt about the Company's ability to continue as a going concern. The Company expects to incur substantial expenses into the foreseeable future for the research, development and commercialization of its current and potential products. In addition, the Company will require additional financing in order to seek to license or acquire new assets, research and develop any potential patents and the related compounds, and obtain any further intellectual property that the Company may seek to acquire. Finally, some of our product candidates or the materials contained therein (such as the Active Pharmaceutical Ingredients for our AC5® product line), are manufactured from facilities in areas impacted by the outbreak of the COVID-19, which could result in shortages due to ongoing efforts to address the outbreak. Historically, the Company has principally funded operations through debt borrowings, the issuance of convertible debt, and the issuance of units consisting of common stock and warrants. Provisions in the Securities Purchase Agreements that the Company entered into on June 28, 2018 ("*2018 SPA*"), and July 6, 2022 ("*2022 SPA*") restrict the Company's ability to effect or enter into an agreement to effect any issuance by the Company or its subsidiary of Common Stock or securities convertible, exercisable or exchangeable for Common Stock (or a combination of units thereof) involving a Variable Rate Transaction (as defined in the 2018 SPA and 2022 SPA) including, but not limited to, an equity line of credit or "At-the-Market" financing facility until the institutional investors in the 2018 SPA collectively own less than 20% of the Series F Warrants and the Series G Warrants purchased by them pursuant to the 2018 SPA, respectively and for a period of six months pursuant to the 2022 SPA. Initially, under the 2022 SPA, we were required to complete an uplist to any of the Nasdaq Global Market, Nasdaq Capital Market, New York Stock Exchange or NYSE American by February 15, 2023. On May 15, 2023, the Company secured waivers with all the holders of the 2022 Notes and Second Notes to extend the deadline to complete an Uplisting Transaction to June 15, 2023. See Note 11 for more information regarding the 2022 Convertible Note Offering including the terms of the 2022 Warrants and 2022 Placement Agent Warrants, as well as for more information regarding the Amendment No. 1 to the 2022 SPA, and Amendment No. 2 to the 2022 SPA.

The 2021 SPA contains certain restrictions on our ability to conduct subsequent sales of our equity securities (See Note 12). The continued spread of COVID-19 and uncertain market conditions may also limit the Company's ability to access capital. If the Company is unable to obtain adequate capital, the Company may be required to reduce the scope, delay, or eliminate some or all of its planned activities. These conditions, in the aggregate, raise substantial doubt as to the Company's ability to continue as a going concern.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The consolidated financial statements do not include any adjustments that might result from this uncertainty.

3. PROPERTY AND EQUIPMENT

At March 31, 2023 and September 30, 2022, property and equipment consisted of:

	Estimated Useful Life (in years)	March 31, 2023	September 30, 2022
Furniture and fixtures	5	$ 9,357	$ 9,357
Leasehold improvements	Life of Lease	8,983	8,983
Computer equipment	3	14,416	14,416
Lab equipment	5	1,000	1,000
		33,756	33,756
Less – accumulated depreciation		32,755	31,712
Property and equipment, net		$ 1,001	$ 2,044

For the three months ended March 31, 2023 and 2022, depreciation expense recorded was $280 and $799, respectively. For the six months ended March 31, 2023 and 2022, depreciation expense recorded was $1,043 and $1,598, respectively.

4. INVENTORIES

Inventories consist of the following:

	March 31, 2022	September 30, 2022
Finished Goods	$ 76,274	$ 9,063
Goods-in-process	1,326,110	1,405,785
Total	$ 1,402,384	$ 1,414,848

The Company capitalizes inventory that has been produced for commercial sale and has been determined to have a probable future economic benefit. The determination of whether or not the inventory has a future economic benefit requires estimates by management. To the extent that inventory is expected to expire prior to being sold or used for research and development or used for samples, the Company will write down the value of inventory. In evaluating the net realizable value of the inventory, appropriate consideration is given to obsolescence, excessive levels, deterioration, and other factors.

5. INSURANCE PREMIUM FINANCING

In July 2022, the Company entered into a finance agreement with First Insurance Funding in order to fund a portion of its insurance policies. The amount financed is approximately $354,000 and incurs interest at a rate of 2.99%. The Company is required to make monthly payments of approximately $35,000 through April 2023. The outstanding balance as of March 31, 2023 and September 30, 2022 was approximately $35,000 and $248,000, respectively.

6. STOCK-BASED COMPENSATION

2013 Stock Incentive Plan

On June 18, 2013, the Company established the 2013 Stock Incentive Plan (the "*2013 Plan*"). Under the 2013 Plan, as of September 30, 2022, a maximum number of 170,571 shares of the Company's authorized and available common stock could be issued in the form of options, stock appreciation rights, sales or bonuses of restricted stock, restricted stock units or dividend equivalent rights, and an award may consist of one such security or benefit, or two or more of them in any combination or alternative. The 2013 Plan provides that on the first business day of each fiscal year commencing with fiscal year 2014, the number of shares of our common stock reserved for issuance under the 2013 Plan for all awards except for incentive stock option awards will be subject to increase by an amount equal to the lesser of (A) 15,000 Shares, (B) four (4) percent of the number of shares outstanding on the last day of the immediately preceding fiscal year of the Company, or (C) such lesser number of shares as determined by the Company's Board of Directors (the "*Board*"). The exercise price of each option shall be the fair value as determined in good faith by the Board at the time each option is granted. On October 1, 2022, the aggregate number of authorized shares under the Plan was further increased by 15,000 shares to a total of 185,571 shares.

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

Share-Based Awards

During the six months ended March 31, 2023, the Company awarded 20,875 options to employees and directors and 3,625 options to consultants to purchase shares of Common Stock under the 2013 Plan**.**

Share-based compensation expense for awards granted during the six months ended March 31, 2023 was based on the grant date fair value estimated using the Black-Scholes Model.

Common Stock Options

Stock compensation activity under the 2013 Plan for the six months ended March 31, 2023 follows:

	Option Shares Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at September 30, 2022	98,626	$ 52.00	1.36	$ 16,900
Awarded	24,500	$ 8.00		
Forfeited/Cancelled	(18,801)	$ 70.00		
Outstanding at March 31, 2023	104,325	$ 39.00	5.95	104,300
Vested at March 31, 2023	74,000	$ 50.00	4.89	74,000
Vested and expected to vest at March 31, 2023	104,325	$ 39.00	5.95	104,300

As of March 31, 2023, 50,667 shares are available for future grants under the 2013 Plan.

Share-based compensation expense recorded in the Company's Consolidated Statements of Operations for the three months ended March 31, 2023 and 2022 resulting from options awarded to the Company's employees, directors and consultants was approximately $68,000 and $145,000, respectively. Of this amount, during the three months ended March 31, 2023 and 2022, $34,000 and $41,000, respectively, were recorded as research and development expense, and $34,000 and $104,000, respectively were recorded as general and administrative expense in the Company's Consolidated Statements of Operations. Share-based compensation expense recorded in the Company's Consolidated Statements of Operations for the six months ended March 31, 2023 and 2022 resulting from options awarded to the Company's employees, directors and consultants was approximately $170,000 and $287,000, respectively. Of this amount, during the six months ended March 31, 2023 and 2022, $48,000 and $94,000, respectively, were recorded as research and development expense, and $122,000 and $193,000, respectively were recorded as general and administrative expense in the Company's Consolidated Statements of Operations.

During the six months ended March 31, 2023 and 2022, no options awarded were exercised.

As of March 31, 2023, there is approximately $245,000 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 2.40 years.

Restricted Stock

Restricted stock activity under the 2013 Plan for the three months ended March 31, 2023 and 2022, in shares, follows:

	Three months Ended	
	March 31, 2023	March 31, 2022
Non Vested at December 31, 2022 and 2021	250	1,875
Vested	(250)	(625)
Non Vested at March 31, 2023 and 2022	-	1,250

The weighted grant date fair value average of the restricted stock for the three months ended March 31, 2023 and 2022 follows:

	Three months Ended	
	March 31, 2023	March 31, 2022
Non Vested at December 31, 2022 and 2021	$ 18.00	$ 20.00
Vested	(18.00)	(20.00)
Non Vested at March 31, 2023 and 2022	$ -	$ 20.00

Restricted stock activity under the 2013 Plan for the six months ended March 31, 2023 and 2022, in shares, follows:

	Six months Ended	
	March 31, 2023	March 31, 2022
Non Vested at September 30, 2022 and 2021	250	2,250
Vested	(250)	(1,000)
Non Vested at March 31, 2023 and 2022	-	1,250

The weighted grant date fair value average of the restricted stock for the six months ended March 31, 2023 and 2022 follows:

	Six months Ended	
	March 31, 2023	March 31, 2022
Non Vested at September 30, 2022 and 2021	$ 18.00	$ 20.00
Vested	(18.00)	(20.00)
Non Vested at March 31, 2023 and 2022	$ -	$ 20.00

For the three months ended March 31, 2023 and 2022, compensation expense recorded for the restricted stock awards was approximately $,000 and $10,000, respectively. For the six months ended March 31, 2023 and 2022, compensation expense recorded for the restricted stock awards was approximately $3,000 and $20,000, respectively.

7. REGISTERED DIRECT OFFERINGS

On September 30, 2016, the Company filed a registration statement with the SEC utilizing a "shelf" registration process, which was subsequently declared effective by the SEC on October 20, 2016 (such registration statement, the "*Shelf Registration Statement*"). Under the Shelf Registration Statement, the Company may offer and sell any combination of its Common Stock, warrants, debt securities, subscription rights, and/or units comprised of the foregoing to raise up to $50,000,000 in gross proceeds.

On February 20, 2017, the Company entered into a Securities Purchase Agreement (the "*2017* SPA") with six accredited investors (collectively, the "*2017 Investors*") providing for the issuance and sale by the Company to the 2017 Investors of an aggregate of 50,833 units at a purchase price of $120.00per unit in a registered offering (the "*2017 Financing*"). The securities comprising the units sold in the 2017 Financing were issued under the Shelf Registration Statement, and consisted of a share of Common Stock, a warrant equal to 55% of the shares of Common Stock at an exercise price of $150.00 per share ("*Series F Warrant*") at any time prior to the fifth anniversary of the issuance date of the Series F Warrant subject to certain restrictions on exercise (the "*2017 Warrants*") and the shares issuable upon exercise of the 2017 Warrants (the "*2017 Warrant Shares*").

On June 28, 2018, the Company entered into a Securities Purchase Agreement ("*2018 SPA*") with eight accredited investors (collectively, the "*2018 Investors*") providing for the issuance and sale by the Company to the 2018 Investors of an aggregate of 45,350 units at a purchase price of $100.00 per unit in a registered offering ("*2018 Financing*"). The securities comprising the units sold in the 2018 Financing were issued under the Shelf Registration Statement, and consisted of a share of Common Stock, a warrant to purchase up to a number of shares of the Company's Common Stock equal to 75% of the shares of Common Stock at an exercise price of $140.00 per share ("*Series G Warrant*") at any time prior to the fifth anniversary of the issuance date of the Series G Warrant subject to certain restrictions on exercise (the "*2018 Warrants*") and the shares issuable upon exercise of the 2018 Warrants (the "*2018 Warrant Shares*").

On May 12, 2019, the Company entered into a Securities Purchase Agreement ("*2019 SPA*") with five accredited investors (collectively, the "*2019 Investors*") providing for the issuance and sale by the Company to the 2019 Investors of an aggregate of 43,077 units at a purchase price of $65.00 per unit in a registered offering ("*2019 Financing*"). The securities comprising the units sold in the 2019 Financing were issued under the Shelf Registration Statement, and consisted of a share of Common Stock, a warrant to purchase one share of Common Stock at an exercise price of $80.00 per share ("*Series H Warrant*") at any time prior to the fifth anniversary of the issuance date of the Series H Warrant subject to certain restrictions on exercise (the "*2019 Warrants*") and the shares issuable upon exercise of the *2019* Warrants (the "*2019 Warrant Shares*").

On March 10, 2023, the Company entered into exchange agreements (the "Exchange Agreements") with each holder (the "Warrantholders") of the Company's outstanding Series G Warrants to purchase shares of the Company's common stock, par value $ 0.001 per share (the "Common Stock") at an exercise price of $140.00 per share (the "Series G Warrants") and the Company's outstanding Series H Warrants to purchase shares of Common Stock at an exercise price of $ 80.00 per share (the "Series H Warrants" and, together with the Series G Warrants, the "Warrants"). Pursuant to the Exchange Agreements, the Warrantholders exchanged 34,013 Series G Warrants for 3,402 shares of Common Stock and 43,077 Series H Warrants for 8,617 shares of Common Stock. All 27,958 remaining Series F Warrants expired during the fiscal year ended September 30, 2022.

8. Derivative Liabilities

The Company accounted for the Series F Warrants, Series G Warrants and the Series H Warrants in accordance with ASC 815-10. Since the Company was required to purchase its Series F Warrants, Series G Warrants and Series H Warrants for an amount of cash equal to $ 36.00, $22.00 and $10.66, respectively, for each share of Common Stock ("Minimum") they are recorded as liabilities at the greater of the Minimum or fair value. They are marked to market each reporting period through the Consolidated Statement of Operations.

On the respective closing dates of June 28, 2018 and May 12, 2019, respectively, the derivative liabilities related to the Series G Warrants and Series H Warrants were recorded at an aggregate fair value of $1,628,113. Given that the fair value of the derivative liabilities was less than the net proceeds, the remaining proceeds were allocated to Common Stock and additional paid-in-capital.

On March 10, 2023, Arch Therapeutics, Inc. entered into exchange agreements (the "Exchange Agreements") with each holder (the "Warrantholders") of the Company's outstanding Series G Warrants to purchase shares of the Company's common stock, par value $ 0.001 per share at an exercise price of $140.00 per share and the Company's outstanding Series H Warrants to purchase shares of Common Stock at an exercise price of $ 80.00 per share. Pursuant to the Exchange Agreements, the Warrantholders exchanged 34,013 Series G Warrants for 3,402 shares of Common Stock and 43,077 Series H Warrants for 8,617 shares of Common Stock.

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 and $49,278 was recorded as part of shareholder's deficit. During the three months ended March 31, 2023 and 2022, $0 and $1,000,000, respectively was recorded to decrease the fair value of derivative liability related to the Series F warrants.

Fair Value Measurements Using Significant Unobservable Inputs – Six Months Ended March 31, 2023 (Level 3)

	Series G	Series H
Beginning balance at September 30, 2022	$ 748,275	$ 459,200
Exchange of warrants into common stock	(13,948)	(35,330)
Extinguishment of derivative liabilities	(734,327)	(423,870)
Ending balance at March 31, 2023	$ —	$ —

Fair Value Measurements Using Significant Unobservable Inputs - Six Months Ended March 31, 2022 (Level 3)

	Series F	Series G	Series H
Beginning balance at September 30, 2021	$ 1,000,000	$ 748,275	$ 459,200
Issuances	—	—	—
Adjustments to estimated fair value	—	—	—
Expiration of derivative liability	(1,000,000)	—	—
Ending balance at March 31, 2022	$ —	$ 748,275	$ 459,200

The derivative liabilities as of March 10, 2023 and September 30, 2022 are valued at the greater of their minimum value or by using the Black Scholes Model with the following assumptions.

As of March 10, 2023, the derivative liabilities are recorded at their minimum value.

	Series G	Series H
Closing price per share of Common Stock	$ 4.10	$ 4.10
Exercise price per share	$ 140.00	$ 80.00
Expected volatility	179.41%	141.03%
Risk-free interest rate	4.91%	4.75%
Dividend yield	-	-
Remaining expected term of underlying securities (years)	0.24	1.31

As of September 30, 2022, the derivative liabilities are recorded at their minimum value.

	Series G	**Series H**
Closing price per share of Common Stock	$ 3.84	$ 3.84
Exercise price per share	$ 140.00	$ 80.00
Expected volatility	132.97%	122.50%
Risk-free interest rate	4.05%	4.14%
Dividend yield	—	—
Remaining expected term of underlying securities (years)	0.69	1.57

9. OCTOBER 2019 REGISTERED DIRECT OFFERING

On October 16, 2019, the Company entered into a Securities Purchase Agreement *(the* "*October* 2019 *SPA*"*)* with seven accredited investors (collectively, the "*October* 2019 *Investors*") providing for the issuance and sale by the Company to the 2019 Investors of an aggregate of71,429 units at a purchase price of $35.00 per unit in a registered offering ("*October* 2019 *Financing*"). The securities comprising the units sold in the October 2019 Financing were issued under the Shelf Registration Statement, and consisted of a share of Common Stock, a warrant to purchase one share of Common Stock at an exercise price of $44.00 per share ("*Series I Warrant*") at any time prior to the fifth anniversary of the issuance date of the Series I Warrant subject to certain restrictions on exercise and the shares issuable upon exercise of the Series I Warrants (collectively, the "October 2019 Warrant Shares"). As of October 18, 2019, the Company recorded the 71,429 shares as Common Stock. Pursuant to the Engagement Agreement (as defined below), the Company also agreed to issue to the Placement Agent, or its designees, warrants to purchase up to 5,358 shares (the "Placement Agent Warrants"). The 2019 Placement Agent Warrants have substantially the same terms as the Series I Warrants, except that the exercise price of the Placement Agent Warrants is $43.75 per share and the term of the Placement Agent Warrants is five years.

The gross proceeds to the Company from the October 2019 Financing, which were received as of October 18, 2019, were approximately $2.5 million before deducting financing costs of approximately $333,000 which includes approximately $158,000 of placement fees. The number of shares of the Company's Common Stock into which each of the Series I Warrants is exercisable and the exercise price therefore are subject to adjustment, as set forth in the Series I Warrants, including adjustments for stock subdivisions or combinations (by any stock split, stock dividend, recapitalization, reorganization, scheme, arrangement or otherwise).

The Company engaged H.C. Wainwright as its exclusive institutional investor placement agent (the "*Placement Agent*") in connection with the October 2019 SPA pursuant to an engagement agreement dated as of October 10, 2019 (the "*2019 Engagement Agreement*"). In consideration for the services provided by the Placement Agent, the Placement Agent was entitled to receive cash fees ranging from 6.0% to 8.2% of the gross proceeds received by the Company, as well as reimbursement for all reasonable expenses incurred by it in connection with its engagement. The Company received gross proceeds of approximately $2.5 million in the aggregate, resulting in a fee of approximately $158,000.

During the three and six months ended March 31, 2023 and 2022,no Series I Warrants or Placement Agent Warrants were exercised. As of March 31, 2023, up to 71,429 and 5,358 shares may be acquired upon the exercise of the Series I Warrants and Placement Agent Warrants, respectively.

Common Stock

On October 18, 2019, the Closing Date of the October 2019 Financing, the Company issued71,429 shares of Common Stock.

Equity Value of Warrants

The Company accounted for the Series I Warrants and the Placement Agent Warrants relating to the aforementioned October 2019 Financing in accordance with ASC 815-40. Because the Series I Warrants and the Placement Agent Warrants are indexed to the Company's Common Stock, they are classified within stockholders' deficit in the accompanying consolidated financial statements.

10. 2021 REGISTERED DIRECT OFFERING

On February 11, 2021, the Company entered into a Securities Purchase Agreement (the "*2021 SPA*") with certain institutional and accredited investors (collectively, "*2021 Investors*") providing for the issuance and sale by the Company to the 2021 Investors of an aggregate of215,625 shares (the "Shares") of the Company's Common Stock, and warrants (the "*Series K Warrants*") to purchase an aggregate of161,719 shares (the "*Warrant Shares*") of Common Stock, at a combined offering price of $32.00 per share (the "*2021 Financing*"). The Series K Warrants have an exercise price of $34.00 per share and are exercisable for a period of5.5 years. The aggregate gross proceeds for the sale of the Shares and Series K Warrants were approximately $6.9 million, before deducting the Placement Agent's fees and expenses and other offering expenses payable by the Company, of approximately $700,000. Pursuant to an engagement agreement dated as of February 8, 2021 (the "*2021 Engagement Agreement*"), by and between the Company and the Placement Agent, the Company agreed to pay the Placement Agent cash fees equal to (i) 7.5% of the gross proceeds received by the Company from certain investors in the 2021 Financing, and (ii) 6.0% of the gross proceeds received by the Company from certain investors that had pre-existing relationships with the Company. In addition, the Placement Agent received a one-time non-accountable expense fee of $10,000, up to $50,000 for fees and expenses of legal counsel and other out-of-pocket expenses and $10,000 for clearing expenses. Pursuant to the 2021 Engagement Agreement, the Company also agreed to issue to the Placement Agent, or its designees, warrants to purchase up to 7.5% of the aggregate number of Shares sold to the 2021 Investors, or warrants to purchase up to16,172 shares (the "2021 *Placement Agent Warrants*") of the Company's Common Stock. The 2021 Placement Agent 2 Warrants have substantially the same terms as the Series K Warrants, except that the exercise price of the 2021 Placement Agent Warrants is $40.00 per share. The 2021 Engagement Agreement contained indemnity and other customary provisions for transactions of this nature.

The 2021 SPA contained certain restrictions on the Company's ability to conduct subsequent sales of the Company's equity securities. In particular, we were prohibited from entering into or effecting a Variable Rate Transaction (as defined in the 2021 SPA) until February 11, 2022; provided, however, the Company may enter into and effect an at-the-market offering facility with the Placement Agent.

The number of shares of the Company's Common Stock into which each of the Series K Warrants is exercisable and the exercise price therefore are subject to adjustment, as set forth in the Series K Warrants, including adjustments for stock subdivisions or combinations (by any stock split, stock dividend, recapitalization, reorganization, scheme, arrangement or otherwise).

During the three and six months ended March 31, 2023,no Series K Warrants or Placement Agent 2 Warrants were exercised. As of March 31, 2023, up to 161,719 and 16,172 shares may be acquired upon the exercise of the Series K Warrants and Placement Agent Warrants, respectively.

Common Stock

On February 17, 2021, the Closing Date of the 2021 Financing, the Company issued215,625 shares of Common Stock.

Equity Value of Warrants

The Company accounted for the Series K Warrants and the Placement Agent 2 Warrants relating to the aforementioned February 2021 Registered Direct Offering in accordance with ASC 815-40, *Derivatives and Hedging*. Because the Series K Warrants and the Placement Agent 2 Warrants are indexed to the Company's stock, they are classified within stockholders' deficit in the accompanying consolidated financial statements.

11. 2022 CONVERTIBLE NOTE OFFERING AND SECOND NOTES OFFERING

On July 7, 2022, the Company announced that it had entered into a Securities Purchase Agreement (the "2022 SPA") with certain institutional and accredited individual investors (collectively, the "2022 Investors") providing for the issuance and sale by the Company to the 2022 Investors of (i) Senior Secured Convertible Promissory Notes (each a "2022 Note" and collectively, the "2022 Notes") in the aggregate principal amount of $4.23 million, which includes an aggregate $0.705 million original issue discount in respect of the 2022 Notes; (ii) warrants (the "2022 Warrants"), to purchase an aggregate of 425,554 shares (the "2022 Warrant Shares") of Common Stock; and (iii) 63,833 shares of Common Stock (the "2022 Inducement Shares") equal to15% of the principal amount of the 2022 Notes divided by the closing price of the Common Stock immediately prior to the Closing Date (as defined below). The 2022 Notes, 2022 Warrants and 2022 Inducement Shares were issued as part of a convertible note offering authorized by the Company's board of directors (the "2022 Convertible Note Offering"). The aggregate gross proceeds for the sale of the 2022 Notes, 2022 Warrants and 2022 Inducement Shares was approximately $3.5 million, before deducting debt issuance costs of $775,000 consisting of fair value of the placement agent's warrants of approximately $220,000 and other estimated fees and offering expenses payable by the Company of approximately $555,000. The closing of the sales of these securities under the 2022 SPA occurred on July 6, 2022 (the "2022 Closing Date").

On January 18, 2023, the Company entered into Amendment No. 1 to the 2022 SPA (the "Amendment" and, together with the 2022 SPA, the "Amended 2022 SPA"), with certain Investors in connection with the Second Closing of the 2022 Convertible Note Offering for the issuance and sale by the Company to such Investors of an aggregate of (i) Unsecured Convertible Promissory Notes (each a "Second Note" and collectively, the "Second Notes") in the aggregate principal amount of $636,000, which includes an aggregate $106,000 original issue discount in respect of the Second Notes; (ii) warrants (the "Second Warrants") to purchase an aggregate of127,968 shares (the "Second Warrant Shares") of Common Stock; and (iii) 9,598 shares of Common Stock (the "Second Inducement Shares"). The aggregate gross proceeds for the sale of the Second Notes, Second Warrants and Second Inducement Shares was approximately $530,000, before deducting the placement agent's fees and other estimated fees and offering expenses payable by the Company of approximately $15,000. The second closing of the sales of these securities under the Amended 2022 SPA occurred on January 18, 2023 (the "Second Closing Date").

The 2022 Notes and the Second 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 Closing Date until the 2022 Notes and Second 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 2022 Notes and Second Notes. Any amount of principal or interest on the 2022 Notes and Second 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 2022 Notes and the Second Notes are convertible into shares of Common Stock at the option of each holder of the 2022 Notes and the Second Notes from the date of issuance at $9.14 (the "Conversion Price") through the later of (i) January 6, 2024 (the "Maturity Date") or (ii) the date of payment of the Default Amount (as defined in the 2022 Notes); provided, however, certain 2022 Notes and Second 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 Common Stock would be aggregated with the holder's, would be deemed to beneficially own more than 4.99% of the Common Stock (as applicable, the "Ownership Limitation") immediately after giving effect to the Conversion; and provided further, the holder, upon notice to us, may increase or decrease the Ownership Limitation; (i) the Ownership Limitation may only be increased to a maximum of 9.99% of the Common Stock; and (ii) any increase in the Ownership Limitation will not become effective until the 61st day after delivery of such waiver notice. The Conversion Price is subject to adjustment as set forth in the 2022 Notes and Second Notes.

The 2022 Notes and Second Notes contain customary events of default, which include, among other things, (i) our failure to pay when due any principal or interest payment under the 2022 Notes and Second Notes; (ii) our insolvency; (iii) delisting of our Common Stock; (iv) our breach of any material covenant or other material term or condition under the 2022 Notes and Second Notes; and (v) our breach of any representations or warranties under the 2022 Notes and Second Notes which cannot be cured within five (5) days. Further, events of default under the 2022 Notes and Second 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 Notes and/or Second Notes 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 June 15, 2023 (as amended) (an " *Uplist Transaction*").

The 2022 Warrants and the Second 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) became exercisable immediately after their issuance; and (iv) have a provision preventing the exercisability of such 2022 Warrants and Second Warrants if, as a result of the exercise of the 2022 Warrants and Second Warrants, the holder, together with its affiliates and any other persons whose beneficial ownership of our Common Stock would be aggregated with the holder's, would be deemed to beneficially own more than the Ownership Limitation. The holder, upon notice to us, may increase or decrease the Ownership Limitation; provided that (i) the Ownership Limitation may only be increased to a maximum of 9.99% of our Common Stock; and (ii) any increase in the Ownership Limitation will not become effective until the 61st day after delivery of such waiver notice. The number of shares of Common Stock into which each of the 2022 Warrants and Second Warrants is exercisable and the exercise price therefor are subject to adjustment as set forth in the 2022 Warrants and Second Warrants, including standard antidilution provisions, and adjustments for stock subdivisions or combinations (by any stock split, stock dividend, recapitalization, reorganization, scheme, arrangement or otherwise). In the event of a Fundamental Transaction (as defined in the 2022 Warrants and Second Warrants) holders of the 2022 Warrants and Second Warrants would be entitled to receive alternate consideration in connection with such Fundamental Transaction, but only to the extent that holders of our Common Stock were entitled to receive the same. Moreover, as long as the 2022 Notes and Second Notes and 2022 Warrants and Second Warrants remaining outstanding, upon the issuance of any security in connection with any potential future financing activity on terms more favorable than the existing terms, the Company has an obligation to notify the holders of the 2022 Notes and Second Notes and 2022 Warrants and Second Warrants of such more favorable terms and to use best efforts to effect such terms in the 2022 Notes and Second Notes and 2022 Warrants and Second Warrants. Finally, because of the Company's net loss position, the shares underlying the 2022 Notes and Second Notes on an as converted basis are excluded from the calculation of basic and fully diluted earnings per share. Similarly, because of the Company's net loss position, there was no impact on the calculation of basic and fully diluted earnings per share related to the classification of the 2022 Warrants and Second Warrants as participating securities.

The Company retained a placement agent in connection with the private placement of $2.4 million of the 2022 Notes to the institutional investors. The Company paid the 2022 Placement Agent 10% of the gross proceeds received from certain institutional investors, or $240,000 and we also reimbursed the 2022 Placement Agent approximately $58,000 for non-accountable banking fees, legal fees and other expenses. In addition, we issued 2022 Placement Agent Warrants to purchase an aggregate of31,510 shares of Common Stock. An additional $1.1 million was raised in connection with the placement of the private placement notes, which included certain accredited investors some of which were Board members and executive officers of the Company. Board member, Laurence Hicks, and executive officers, Terrence W. Norchi and Michael S. Abrams, invested in the 2022 Notes. The investment made in the 2022 Notes made by the Board member and executive officers totaled $80,000.

The Company's agreement with the 2022 Placement Agent was still effective at the time of the private placement of $0.5 million of the Second Notes to certain institutional investors. The Company owes the 2022 Placement Agent 10% of the gross proceeds received from certain institutional investors, or $50,000, such amount was deferred until the Company completes an additional financing with gross proceeds of at least $1 million. In addition, we issued or are required to issue 2022 Placement Agent Warrants to purchase an aggregate of 6,565 shares of Common Stock.

In addition, as a part of the 2022 Convertible Note Offering, certain holders of the Company's10% Series 2 Convertible Notes agreed to exchange their Series 2 Notes for promissory notes of the Company on substantially similar terms to those of the 2022 Notes (the "Exchanged Notes"). The Exchanged Notes are convertible into 76,563 shares of Common Stock at a conversion price of $9.14. The holders of the Exchanged Notes did not receive warrants or inducement shares. In connection with the issuance of the Exchanged Notes, the holders of the Series 2 Notes that participated in the exchange entered into a subordination agreement on July 6, 2022 (the "Closing Date") to subordinate their rights in respect of the Exchanged Notes to the rights of the Investors in respect of the 2022 Notes. As of July 7, 2022, approximately $600,000 of the Series 2 Notes and accrued interest of approximately $100,000 were included in the exchange.

Further, in connection with the 2022 Convertible Note Offering, we initially were required to complete an Uplist Transaction by February 15, 2023 under the terms of the 2022 Notes. If we are unable to complete or secure an extension to the Uplist Transaction deadline, then the 2022 Notes and Second Notes will become immediately due and payable and we will be obligated to pay to each holder of the 2022 Notes and Second Notes an amount equal to 125%, multiplied by the sum of the outstanding principal amount of the 2022 Notes and Second Notes plus any accrued and unpaid interest on the unpaid principal amount of the 2022 Notes and Second Notes to the date of payment, plus any default interest and any other amounts owed to the holder, payable in cash or shares of Common Stock. The Company has secured waivers from all of the holders of the 2022 Notes and Second Notes to extend the deadline to complete an uplist from (i) February 15, 2023 to March 15, 2023, (ii) March 15, 2023 to April 15, 2023, (iii) April 15, 2023 to May 15, 2023 and (iv) effective May 15, 2023 to June 15, 2023. No consideration was paid by the Company in connection with any of the Uplist Transaction deadline extensions.

On March 10, 2023, the Company entered into an amendment ("Amendment No. 2 to the First Notes") with each of the holders of the Company's outstanding 2022 Notes issued in connection with a private placement financing the Company completed on July 6, 2022 (the "First Closing"). On March 10, 2023, the Company also entered into an amendment ("Amendment No. 2 to the Second Notes" and, together with Amendment No. 2 to the First Notes, "Amendment No. 2 to the 2022 Notes") with each Second Notes issued in connection with a private placement financing the Company completed on January 18, 2023.

Under Amendment No. 2 to the 2022 Notes and Second Notes, the following amendments to the 2022 Notes will be effective at the moment in time immediately preceding the consummation of the offering in connection with the uplist of the Common Stock to any of the Nasdaq Global Market, Nasdaq Capital Market, New York Stock Exchange or NYSE American (the "Uplist Transaction"). If a holder of the 2022 Notes and/or the Second Notes elects to participate in the Uplist Transaction (each, a "Participating Holder") for an amount equal to no less than 50% of the Participating Holder's original investment amount in the 2022 Convertible Note Offering, such holder will be entitled to repayment of the principal amount of their 2020 Notes and/or Second Notes upon closing of the Uplist Transaction. In addition, the Company will issue to each Participating Holder a new convertible promissory note equal to the product of 2.4 and the sum of any prepayment premiums and total interest payable on such Participating Holder's 2022 Notes and/or Second Notes (the "2023 Notes"). The 2023 Notes will have a maturity date of July 6, 2024 and will be on substantially the same terms as the Second Notes. For non-Participating Holders (each, a "Non-Participating Holder"), the maturity date of the 2022 Notes and/or Second Notes held by such Non-Participating Holder will be extended to July 6, 2024. Further, each Non-Participating Holder will waive their right to demand repayment of any portion of the outstanding balance of such holder's 2022 Notes and/or upon an Uplist Transaction. Notwithstanding the foregoing, if the registration statement filed in connection with the Uplist Transaction is not declared effective by 11:59 P.M. (EST) on June 15, 2023 (the "Amendment No. 2 Termination Date"), Amendment No. 2 to the 2022 Notes will automatically terminate and shall be of no further force or effect without any further action by the Company or the Requisite Holders, provided, that the Amendment No. 2 Termination Date may be extended by the written approval of the Company and holders of the 2022 Notes and Second Notes which purchased at least 50% plus $1.00 of the 2022 Notes and Second Notes based on the initial principal amounts thereunder (the "Requisite Holders").

During the three months ended March 31, 2023, the Company recorded interest expense on the 2022 Notes and the Second Notes of approximately $610,000 consisting of accrued interest of approximately $136,000 and accretion of original issue discount debt discount and issuance costs of approximately $474,000. During the six months ended March 31, 2023, the Company recorded interest expense on the 2022 Notes and the Second Notes of approximately $1,110,000 consisting of accrued interest of approximately $263,000 and accretion of original issue discount debt discount and issuance costs of approximately $847,000.

Allocation of Proceeds

The Company accounted for the 2022 Notes and Second Notes, the 2022 Warrants and the Second Warrants, the 2022 Inducement Shares and Second Inducement Shares relating to the aforementioned 2022 Notes and Second Notes in accordance with ASC 470-20-25-2 "Debt" which states that the allocation of the proceeds from the financing shall be based on the relative fair values of the securities issued at the time of the issuance. The 2022 Inducement Shares and the 2022 Warrants, which are indexed to the Company's stock, are classified within stockholders' equity (deficit) in the accompanying consolidated financial statements. The allocated value of the 2022 Inducement Shares and the 2022 Warrants are $314,523 and $1,470,133, respectively. The allocated value of the Second Inducement Shares and the Second Warrants are $25,840 and $256,439, respectively. The allocated value of the 2022 Notes of $1,740,344 are allocated as short-term liabilities in the accompanying consolidated financial statements. The allocated value of the Second Notes of $247,721 are allocated as short-term liabilities in the accompanying consolidated financial statements The fair value of the 2022 Placement Agent Warrants and the Second Placement Agent Warrants of $ 219,894 and $28,093, respectively, are being accounted for as debt issuance costs and are classified within stockholders' equity (deficit) in the accompanying consolidated financial statements. As of March 31, 2023 and September 30, 2022, the net carrying amount of the 2022 Notes was $2,454,683 and $1,662,492, respectively, with unamortized debt discount and issuance costs of $1,775,317 and $2,567,508, respectively. As of March 31, 2023, the Company reclassified the carrying amount of the Exchanged Notes of $699,781 (see Note 12) that were previously included in 2022 Notes payable to Unsecured convertible notes. After the reclassification, the Unsecured convertible notes included both the Second Notes and the Exchanged Notes. In addition, as of March 31, 2023, the net carrying amount of the Second Notes was $281,536 with unamortized debt discount and issuance costs of $354,464 and are also included in Unsecured convertible notes.

The 2022 Warrants and the 2022 Placement Agent Warrants were valued as of July 6, 2022 using the Black Scholes Model with the following assumptions:

	2022 Warrants	2022 Placement Agent Warrants
Closing price per share of Common Stock	$ 9.98	$ 9.98
Exercise price per share	$ 9.94	$ 10.06
Expected volatility	88.44%	88.44%
Risk-free interest rate	2.96%	2.96%
Dividend yield	—	—
Remaining expected term of underlying securities (years)	5.0	5.0

The Second Warrants and the Second Placement Agent Warrants were valued as of January 18, 2023using the Black Scholes Model with the following assumptions:

	Second Warrants	Second Placement Agent Warrants
Closing price per share of Common Stock	$ 5.76	$ 5.76
Exercise price per share	$ 9.94	$ 10.06
Expected volatility	111.31%	111.31%
Risk-free interest rate	3.43%	3.43%
Dividend yield	—	—
Remaining expected term of underlying securities (years)	5.0	5.0

12. SERIES CONVERTIBLE NOTES

On June 4, 2020 and November 6, 2020, the Company issued unsecured 10% Series 1 Convertible Notes ("Series 1 Notes") and Series 2 Convertible Notes ("Series 2 Notes", and collectively with the Series 1 Notes, the "Series Convertible Notes") in the aggregate principal amount of $550,000 and $1,050,000, respectively. The maturity dates of the Series 1 Notes and Series 2 Notes are June 30, 2023 and November 30, 2023, respectively. The Series Convertible Notes provide, among other things, for (i) a term of approximately three years; (ii) the Company's ability to prepay the Series Convertible Notes, in whole or in part, at any time; (iii) the automatic conversion of the Series Convertible Notes upon a Change of Control (all capitalized terms not otherwise defined to have the meaning ascribed to such terms of the Series Convertible Notes) into shares of the Company's Common Stock, at a per share price of $54.00 and $50.00 (the "Conversion Price") for the Series 1 Notes and Series 2 Notes, respectively; (iv) the ability of the holders of the Series Convertible Notes (each a "Holder", and together, the "Holders") to convert the principal of the Series Convertible Notes, along with accrued interest, in whole or in part, into shares of Common Stock at the respective Conversion Price; (v) the Company's ability to convert all Note Obligations outstanding upon a Qualified Equity Financing into shares of Common Stock at the respective Conversion Price; (vi) the Company's ability to convert the principal of the Series Convertible Notes, along with accrued interest, in whole or in part, into shares of Common Stock at the respective Conversion Price in the event the volume weighted average price ("VWAP") of the Common Stock equals or exceeds $64.00 per share for at least fifteen consecutive Trading Days; (vii) the Company's ability to convert all outstanding Note Obligations into shares of Common Stock at the respective Conversion Price (an "In Kind Note Repayment") in lieu of repaying the Note Obligations outstanding on the Maturity Date, provided, however, that in the case of an In-Kind Note Repayment, the outstanding Note Obligations will be calculated by increasing by thirty-five percent the aggregate sum of the unpaid Principal Amount held by each Holder and the accrued interest at a rate of ten percent per annum, subject to, with respect to any portion of the Principal Amount that is converted or prepaid before the twelve month anniversary of the Issuance Date, a minimum interest payment equal to ten percent of the amount that is converted or prepaid. As consideration for agreeing to subordinate to the 2022 Notes, the premium applicable in connection with an In-Kind Note Repayment at maturity was increased from thirty-five percent to sixty percent.

Beginning June 22, 2015 and through June 30, 2015, the Company entered into a series of substantially similar subscription agreements with 20 accredited investors providing for the issuance and sale by the Company to the 2015 Investors, in a private placement, of an aggregate of 71,954 Units at a purchase price of $44.00 per Unit. Each Unit consisted of a share of Common Stock and a Series D Warrant to purchase a share of Common Stock at an exercise price of $50.00 per share at any time prior to the fifth anniversary of the issuance date of the Series D Warrant and the shares issuable upon exercise of the Series D Warrants.

On June 3, 2020, the Company entered into an agreement (the "Agreement") with the holders of a majority (the "Majority Holders") of the outstanding warrants classified as "Series D Warrants", resulting in approximately $850,000 of proceeds as a result of the full exercise of all Series D Warrants. Under the terms of the Agreement, in exchange for fully exercising their remaining Series D Warrants for 23,636 shares of Common Stock on June 4, 2020, the Majority Holders were issued warrants to purchase 17,727 shares of Common Stock at an exercise price of $50.00 over a 1-year term ("Series J Warrants"). On November 6, 2020, as consideration for an investment in the Series Convertible Notes, the Company entered into an amendment to the Series J Warrants with a holder of a Series J Warrant exercisable for up to 16,875 shares of Common Stock, to extend the term of the Series J Warrant from one year to thirty months.

On June 22, 2020, the Company entered into a Series J Warrant Issuance Agreement (the "Keyes Sulat Agreement") with the Keyes Sulat Revocable Trust (the "Trust"), also a holder of outstanding Series D Warrants, resulting in approximately $82,000 of proceeds as a result of the full exercise of the Trust's Series D Warrants. Under the terms of the Keyes Sulat Agreement, in exchange for fully exercising the Trust's remaining Series D Warrants for 2,273 shares of Common Stock on June 22, 2020, the Trust was issued Series J Warrants to purchase 1,705 shares of Common Stock at an exercise price of $50.00 over a one-year term. James R. Sulat, a former member of the Board, is a co-trustee of the Trust, of which members of Mr. Sulat's immediate family are beneficiaries. Mr. Sulat disclosed his interest in the Trust to the Board prior to its approval of the transaction and abstained from voting on the transaction.

As described in Note 11 above, as a part of the 2022 Convertible Note Offering, certain holders of the Series 2 Notes agreed to exchange Series 2 Notes with an aggregate principal amount of $600,000 and accrued interest of approximately $100,000 for promissory notes of the Company on substantially similar terms to those of the 2022 Notes (the "Exchanged Notes"). As of July 6, 2022, $699,781 of principal and accrued interest of the Series 2 notes was exchanged for the Exchanged Notes.

On March 10, 2023, the Company entered into an amendment (the "Series 2 Note Amendment" and, together with the Series 1 Amendment, the "Series Note Amendments") with each of the holders of the Company's outstanding Series 2 Convertible Notes (as amended, the "Series 2 Notes" and, together with the Series 1 Notes, the "Series Convertible Notes"). Pursuant to the Series Note Amendments, the Company can elect to convert the principal and accrued interest under the Series Convertible Notes (the "Series Note Obligations") at or after the effective time of the Uplisting Transaction, or the maturity date. In the event the Company exercises such option, the Series Note Obligations will be deemed to equal the product of 4.5 (which was previously 1.6 prior to the Series Note Amendments) and the outstanding Series Note Obligations. Notwithstanding the foregoing, if the registration statement filed in connection with the Uplist Transaction is not declared effective by 11:59 P.M. (EST) on or before the Uplisting Transaction deadline under the 2022 Notes and Second Notes, which was originally February 15, 2023, or such later extended date as provided for therein (the "Series Note Amendments Termination Date"), the Series Note Amendments will automatically terminate without any further action by the Company or the holders of the Series Convertible Notes. The Series Note Amendments Termination Date will be automatically extended upon any extension of the Uplisting Transaction deadline under the 2022 Notes and Second Notes. As previously discussed herein, the deadline to complete the Uplist Transaction was extended on multiple previous occasions. As of May 15, 2023 the Uplist Transaction deadline under the 2022 Notes and Second Notes is June 15, 2023. No consideration was paid by the Company in connection with any of the extensions of the Uplisting Transaction deadline under the 2022 Note and Second Notes.

During the three months ended March 31, 2023 and 2022, the Company recorded interest expense on the Series Convertible Notes of approximately $25,000 and $39,000, respectively. During the six months ended March 31, 2023 and 2022, the Company recorded interest expense on the Series Convertible Notes of approximately $50,000 and $80,000, respectively.

13. RISKS AND UNCERTAINTIES – COVID-19 AND 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 the COVID-19 or 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, including the recent war in Ukraine. The extent to which the COVID-19 and recent events in Ukraine will impact the global economy and the Company is uncertain and cannot be reasonably measured.

14. SHAREHOLDER ADVANCES

During the three months ended March 31, 2023, the Company raised $230,000 in the form of shareholder advances from two different investors to support operations in advance of the Company's prospective Uplisting Transaction. During April 2023 and May 2023, the Company raised an additional $308,000 in shareholder advances from a single investor resulting in the Company raising a total of $538,000 in the form of shareholder advances, $488,000 of which was contributed by a single investor, who was subsequently issued an Unsecured convertible note (the "Third Note") in connection with the Third Closing of the 2022 Convertible Note Offering (see Note 15). Finally, on May 18, 2023, the Company received an additional advance from a third party of $350,000, which is expected to be rolled into an anticipated near-term capital raise not related to the prior 2022 Convertible Note Offering. The remaining $50,000 raised by the Company in the form of shareholder advances is expected to be repaid from proceeds expected to be received in connection with the anticipated near-term capital raise not related to the prior 2022 convertible note offering.

15. SUBSEQUENT EVENTS

On April 15, 2023, Arch Therapeutics, Inc. (the "Company") entered into an amendment ("Amendment No. 4 to the First Notes") with the holders of the Company's outstanding 2022 Notes, as amended on February 14, 2023, March 10, 2023 and March 15, 2023 issued in connection with a private placement financing the Company completed on July 6, 2022 (the "First Closing"). On April 15, 2023, the Company also entered into an amendment ("Amendment No. 4 to the Second Notes" and, together with Amendment No. 4 to the First Notes, "Amendment No. 4 to the 2022 Notes") with the holders of the Company's outstanding Second Notes, as amended on February 14, 2023, March 10, 2023 and March 15, 2023 issued in connection with a private placement financing the Company completed on January 18, 2023 (the "Second Closing").

Under Amendment No. 4 to the 2022 Notes, the 2022 Notes and the Second 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") from April 15, 2023 to May 15, 2023.

As a result of the entry into Amendment No. 4 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 April 15, 2023 to May 15, 2023. Also, on April 15, 2023, in connection with Amendment No. 4 to the 2022 Notes, the Series Note Amendments Termination Date set forth under Amendment No. 1 to the Series 1 Unsecured Convertible Promissory Notes and Amendment No. 1 of the Series 2 Unsecured Convertible Promissory Notes was automatically extended from April 15, 2023 to May 15, 2023.

On April 15, 2023, the Company entered into an amendment ("Amendment No. 1 to the A&R Registration Rights Agreement") to that certain Amended and Restated Registration Rights Agreement, dated as of January 18, 2023, by and among the Company and certain institutional and accredited individual investors (as amended, the "A&R Registration Rights Agreement"). Under Amendment No. 1 to the A&R Registration Rights Agreement, the A&R Registration Rights Agreement was amended to extend the filing deadline by which the Company is obligated to file with the Securities and Exchange Commission a registration statement under the Securities Act of 1933, as amended, registering certain securities issued in the Second Closing, from April 18, 2023 to June 17, 2023.

On May 15, 2023, the Company entered into Amendment No. 2 to the 2022 SPA related to the 2022 Convertible Note Offering (the "Amendment" and, together with the 2022 SPA, the "Amended 2022 SPA"), with certain Investors in connection with the Third Closing of the 2022 Convertible Note Offering for the issuance and sale by the Company to an Investor of an aggregate of (i) Unsecured Convertible Promissory Notes (each a "Third Note" and collectively, the "Third Notes") in the aggregate principal amount of $702,720, which includes an aggregate $214,720 original issue discount in respect of the Third Notes; (ii) warrants (the "Third Warrants") to purchase an aggregate of 141,396 shares (the "Warrant Shares") of Common Stock; and (iii)10,608 shares of Common Stock (the "Third Inducement Shares"). The aggregate gross proceeds for the sale of the Third Notes, Third Warrants and Third Inducement Shares was approximately $488,000, before deducting any placement agent's fees and other estimated fees and offering expenses payable by the Company. The third closing of the sales of these securities under the Amended SPA occurred on May 15, 2023 (the "Third Closing Date").

On May 15, 2023, the Company entered into an amendment ("Amendment No. 5 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 and April 15, 2023 issued in connection with a private placement financing the Company completed on July 6, 2022 (the "First Closing") to extend the date of the completion of the Uplist Transaction from May 15, 2023 to June 15, 2023.

On May 15, 2023, the Company also entered into an amendment ("Amendment No. 5 to the Second Notes" and, together with Amendment No. 5 to the First Notes, "Amendment No. 5 to the 2022 Notes") with the holders of the Company's outstanding Second Notes, as amended on February 14, 2023, March 10, 2023, March 15, 2023 and April 15, 2023, issued in connection with a private placement financing the Company completed on January 18, 2023 (the "Second Closing") to extend the date of the completion of the Uplist Transaction from May 15, 2023 to June 15, 2023.

On May 15, 2023, as a result of the entry into Amendment No. 5 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 May 15, 2023 to June 15, 2023. Also, on May 15, 2023, in connection with Amendment No. 5 to the 2022 Notes, the Series Note Amendments Termination Date set forth under Amendment No. 1 to the Series 1 Unsecured Convertible Promissory Notes and Amendment No. 1 of the Series 2 Unsecured Convertible Promissory Notes was automatically extended from May 15, 2023 to June 15, 2023.

On May 18, 2023, the Company received an additional advance from a third party of $350,000, which is expected to be rolled into an anticipated near-term capital raise not related to the prior 2022 Convertible Note Offering.

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 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*") was incorporated under the laws of the State of Nevada on September 16, 2009, under the name "Almah, Inc.". Effective June 26, 2013, the Company completed a merger (the "*Merger*") with Arch Biosurgery, Inc. (formerly known as Arch Therapeutics, Inc.), a Massachusetts corporation ("*ABS*"), and Arch Acquisition Corporation ("*Merger Sub*"), the Company's wholly owned subsidiary formed for the purpose of the transaction, pursuant to which Merger Sub merged with and into ABS and ABS thereby became the wholly owned subsidiary of the Company. As a result of the acquisition of ABS, the Company abandoned its prior business plan and changed its operations to the business of a biotechnology company. Our principal offices are located in Framingham, Massachusetts.

ABS was incorporated under the laws of the Commonwealth of Massachusetts on March 6, 2006, as Clear Nano Solutions, Inc. On April 7, 2008, ABS changed its name from Clear Nano Solutions, Inc. to Arch Therapeutics, Inc. Effective upon the closing of the Merger, ABS changed its name from Arch Therapeutics, Inc. to Arch Biosurgery, Inc.

In the first quarter of 2021, the Company commenced commercial sales of our first product, AC5® Advanced Wound System, and has devoted substantially all of our operational effort to the research, development and regulatory programs necessary to turn our core technology into commercial products. To date, the Company has principally raised capital through debt borrowings, the issuance of convertible debt, and 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 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 stopping bleeding ("*hemostasis*"), controlling leaking ("*sealant*"), and managing wounds created during surgery, trauma or interventional care, or from disease. We have only recently commenced commercial sales of our first product, AC5® Advanced Wound System, and have devoted substantially all of our operational effort to the research, development and regulatory programs necessary to turn our core technology into commercial products. Our goal is to make care faster and safer for patients with 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 and Europe, respectively, and which are intended for skin applications, such as the management of complicated chronic wounds and acute surgical wounds. 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 AC5 platform contain a biocompatible peptide that is synthesized from proteogenic, naturally occurring L-amino acids. Unlike products that contain traditional peptide sequences, when applied to a wound, AC5-based products intercalate into the interstices of the connective tissue and self-assemble into a protective physical-mechanical nanoscale structure that can provide a barrier to leaking substances, such as blood, while also acting as a biodegradable scaffold that enables healing. Self-assembly is a central component of the mechanism of action of our technology. Individual AC5 peptide units readily build themselves, or self-assemble, into an ordered network of nanofibrils when in aqueous solution by the following process:

- Peptide strands line up with neighboring peptide strands, interacting via hydrogen bonds (non-covalent bonds) to form a ribbon-like structure called a beta sheet.
- This process continues such that hundreds of strands organize with charged and polar side chains oriented on one face and non-polar side chains oriented on the opposite face of the beta sheets.
- Interactions of the resulting structure with water molecules and ions results in formation nanofibrils, which extend in length and can join together to form larger nanofibers.
- This network of AC5 peptide nanofibers forms the semi-solid physical-mechanical barrier that interacts with the extracellular matrix, is responsible for sealant, hemostatic and other properties, regardless of the presence of antithrombotic agents, 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 in which there is a wound inside or on the body, and in which there is need for a hemostatic agent or sealant. 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 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.

Operations

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; 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:

- 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 academic, scientific and institutional 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.

In furtherance of our long-term business goals, we expect to continue to focus on the following activities during the next twelve months:

- seek additional funding as required to support the previously described milestones necessary to support operations;
- work with our manufacturing partners to scale up production of product compliant with current good manufacturing practices ("*GMP*"), which activities will be ongoing and tied to our development and commercialization needs;
- further clinical development of our product platform;
- assess our technology platform in order to identify and select product candidates for potential advancement into development;
- seek regulatory input to guide activities related to expanded and new product marketing authorizations;
- 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, which activities will be ongoing as we seek to expand our product candidate portfolio.

We have no commitments for any future capital. We will require significant additional financing to fund our planned operations, including further research and development relating to AC5®, seeking regulatory approval of any 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.

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. We could spend our financial resources much faster than we expect, in which case we would need to raise additional capital as our current funds may not be sufficient to operate our business for the entire duration of that period.

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. These third parties include academic institutions, consultants, advisors, scientists, and/or other collaborators. 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 preclinical and clinical testing and ultimately, as required marketing authorizations are obtained, 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.

Merger with ABS and Related Activities

On June 26, 2013, the Company completed the Merger with ABS, pursuant to which ABS became a wholly owned subsidiary of the Company. In contemplation of the Merger, effective May 24, 2013, the Company increased its authorized Common Stock, from 375,000 shares to 1,500,000 shares and effected a forward stock split, by way of a stock dividend, of its issued and outstanding shares of Common Stock at a ratio of 11 shares to each 1 issued and outstanding share. Also, in contemplation of the Merger, effective June 5, 2013, the Company changed its name from Almah, Inc. to Arch Therapeutics, Inc. and changed the ticker symbol under which its Common Stock trades on the OTC Bulletin Board from “AACH” to “ARTH”.

Recent Developments

On January 13, 2023, the Company filed a Certificate of Change to the Company’s Articles of Incorporation, as amended, with the Secretary of State of the State of Nevada (the “Certificate of Change”), which effected, at 5:00 p.m. Eastern Time on January 17, 2023, a one-for-two-hundred (1:200) reverse stock split (the “Reverse Stock Split”) of both the Company’s issued and outstanding shares of Common Stock, and authorized shares of Common Stock.

As a result of the Reverse Stock Split, every two hundred (200) shares of Common Stock issued and outstanding was combined into one (1) share of Common Stock, with a proportionate 1:200 reduction in the Company’s authorized Common Stock. The Reverse Stock Split affected all stockholders uniformly and did not alter any stockholder’s percentage interest in the Company’s equity, except to the extent that the Reverse Stock Split would have resulted in some stockholders owning a fractional share. No fractional shares were issued in connection with the Reverse Stock Split. Any fractional shares of Common Stock resulting from the Reverse Stock Split were rounded up to the nearest whole post-Reverse Stock Split share and no stockholders received cash in lieu of fractional shares.

The Reverse Stock Split did not change the par value of the Common Stock. All outstanding securities entitling their holders to purchase shares of Common Stock or acquire shares of Common Stock, including stock options, restricted stock units, and warrants, were adjusted as a result of the Reverse Stock Split, as required by the terms of those securities.

On January 13, 2023, the Company filed a Certificate of Amendment (the "Certificate of Amendment") to the Company's Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Nevada to increase the number of authorized shares of Common stock from 4,000,000 shares to 12,000,000 shares. The increase in the number of authorized shares was approved by the Company's stockholders on September 29, 2022.

As previously disclosed in footnote 11 in this Form 10-Q, the Company entered into a Securities Purchase Agreement, dated July 6, 2022 ("SPA"), with certain institutional and accredited individual investors (collectively, the "Investors") for the issuance and sale by the Company to the Investors of convertible promissory notes, warrants to purchase shares of common stock, par value $0.001 per share (the "Common Stock"), and shares of Common Stock (the "2022 Convertible Note Offering"). The First Closing of the 2022 Convertible Note Offering occurred on July 6, 2022.

On January 18, 2023, the Company entered into Amendment No. 1 to the 2022 SPA (the "Amendment" and, together with the SPA, the "Amended 2022 SPA"), with certain Investors in connection with the second closing of the 2022 Convertible Note Offering for the issuance and sale by the Company to such Investors of an aggregate of (i) Unsecured Convertible Promissory Notes (each a "Second Note" and collectively, the "Second Notes") in the aggregate principal amount of $636,000, which includes an aggregate $106,000 original issue discount in respect of the Second Notes; (ii) warrants (the "Second Warrants") to purchase an aggregate of 127,968 shares (the "Second Warrant Shares") of Common Stock; and (iii) 9,598 shares of Common Stock (the "Second Inducement Shares"). The aggregate gross proceeds for the sale of the Second Notes, Second Warrants and Second Inducement Shares was approximately $530,000, before deducting any placement agent's fees and other estimated fees and offering expenses payable by the Company. The second closing of the sales of these securities under the Amended SPA occurred on January 18, 2023 (the "Second Closing Date").

On February 14, 2023, the Company entered into an amendment to its outstanding 2022 Notes issued on July 6, 2022 with the holders of such notes. Also on February 14, 2023, the Company entered into an amendment to its outstanding Second Notes issued on January 18, 2023 with the holders of such notes. These actions amended the 2022 Notes and Second Notes to extend the Uplist Transaction deadline related to the Company's efforts to uplist to any of the Nasdaq Global Market, Nasdaq Capital Market, New York Stock Exchange or NYSE American from February 15, 2023 to March 15, 2023.

As a result of the amendment to the 2022 Notes and Second 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 February 15, 2023 to March 15, 2023.

On March 10, 2023, the Company entered into exchange agreements (the "Exchange Agreements") with each holder (the "Warrantholders") of the Company's outstanding Series G Warrants to purchase shares of the Company's common stock, par value $0.001 per share (the "Common Stock") at an exercise price of $140.00 per share and the Company's outstanding Series H Warrants to purchase shares of Common Stock at an exercise price of $80.00 per share. Pursuant to the Exchange Agreements, the Warrantholders exchanged 34,013 Series G Warrants for 3,402 shares of Common Stock and 43,077 Series H Warrants for 8,617 shares of Common Stock.

On March 10, 2023, the Company entered into an amendment ("Amendment No. 2 to the First Notes") with the Requisite Holders of the Company's outstanding 2022 Notes, as amended on February 14, 2023 issued in connection with a private placement financing the Company completed on July 6, 2022 (the "First Closing"). On March 10, 2023, the Company also entered into an amendment ("Amendment No. 2 to the Second Notes" and, together with Amendment No. 2 to the First Notes, "Amendment No. 2 to the 2022 Notes") with the Requisite Holders of Company's Second Notes, as amended on February 14, 2023, issued in connection with a private placement financing the Company completed on January 18, 2023 (the "Second Closing" and, together with the First Closing, the "2022 Convertible Note Offering").

On March 15, 2023, the Company entered into amendments to the 2022 Notes ("Amendment No. 3 to the First Notes") and Second Notes ("Amendment No. 3 to the Second Notes" and collectively, "Amendment No. 3 to the 2022 Notes" and, together with Amendment No. 2 to the 2022 Notes, the "Amendments to the 2022 Notes") with the Requisite Holders of the 2022 Notes and Second Notes. Under Amendment No. 3 to the 2022 Notes, the 2022 Notes were amended to extend the Amendment No. 2 Termination Date from March 15, 2023 to April 15, 2023, which had the effect of extending to Uplist Transaction deadline from March 15, 2023 to April 15, 2023. In connection with Amendment No. 3 to the 2022 Notes, the Series Note Amendments Termination Date set forth under Amendment No. 1 to the Series 1 Unsecured Convertible Promissory Notes and Amendment No. 1 of the Series 2 Unsecured Convertible Promissory Notes was automatically extended from March 15, 2023 to April 15, 2023.

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 (i) extend the Amendment No. 2 Termination Date from March 15, 2023 to April 15, 2023; (ii) modify the terms of the Uplist Transaction repayment provision; and (iii) provide for the issuance of the 2023 Notes, subject to completion of the Uplist Transaction.

Also, on March 15, 2023, in connection with Amendment No. 3 to the 2022 Notes, the Series Note Amendments Termination Date set forth under Amendment No. 1 to the Series 1 Unsecured Convertible Promissory Notes and Amendment No. 1 of the Series 2 Unsecured Convertible Promissory Notes was automatically extended from March 15, 2023 to April 15, 2023.

On April 15, 2023, the Company entered into an amendment ("Amendment No. 4 to the First Notes") with the holders of the Company's outstanding 2022 Notes, as amended on February 14, 2023, March 10, 2023 and March 15, 2023, issued in connection with a private placement financing the Company completed on July 6, 2022 (the "First Closing"). On April 15, 2023, the Company also entered into an amendment ("Amendment No. 4 to the Second Notes" and, together with Amendment No. 4 to the First Notes, "Amendment No. 4 to the 2022 Notes") with the holders of the Company's outstanding Second Notes, as amended on February 14, 2023, March 10, 2023 and March 15, 2023 issued in connection with a private placement financing the Company completed on January 18, 2023 (the "Second Closing").

Under Amendment No. 4 to the 2022 Notes, the 2022 Notes and Second 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") from April 15, 2023 to May 15, 2023.

As a result of the entry into Amendment No. 4 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 April 15, 2023 to May 15, 2023. Also, on April 15, 2023, in connection with Amendment No. 4 to the 2022 Notes, the Series Note Amendments Termination Date set forth under Amendment No. 1 to the Series 1 Unsecured Convertible Promissory Notes and Amendment No. 1 of the Series 2 Unsecured Convertible Promissory Notes was automatically extended from April 15, 2023 to May 15, 2023.

On April 15, 2023, the Company entered into an amendment ("Amendment No. 1 to the A&R Registration Rights Agreement") to that certain Amended and Restated Registration Rights Agreement, dated as of January 18, 2023, by and among the Company and certain institutional and accredited individual investors (as amended, the "A&R Registration Rights Agreement"). Under Amendment No. 1 to the A&R Registration Rights Agreement, the A&R Registration Rights Agreement was amended to extend the filing deadline by which the Company is obligated to file with the Securities and Exchange Commission a registration statement under the Securities Act of 1933, as amended, registering certain securities issued in the Second Closing, from April 18, 2023 to June 17, 2023.

On May 15, 2023, the Company entered into Amendment No. 2 to the 2022 SPA related to the 2022 Convertible Note Offering (the "Amendment" and, together with the 2022 SPA, the "Amended 2022 SPA"), with certain Investors in connection with the third closing of the 2022 Convertible Note Offering for the issuance and sale by the Company to an Investor of an aggregate of (i) Unsecured Convertible Promissory Notes (each a "Third Note" and collectively, the "Third Notes") in the aggregate principal amount of $702,720, which includes an aggregate $214,720 original issue discount in respect of the Third Notes; (ii) warrants (the "Third Warrants") to purchase an aggregate of 141,396 shares (the "Third Warrant Shares") of Common Stock; and (iii) 10,608 shares of Common Stock (the "Third Inducement Shares"). The aggregate gross proceeds for the sale of the Third Notes, Third Warrants and Third Inducement Shares was approximately $488,000, before deducting the placement agent's fees and other estimated fees and offering expenses payable by the Company. The third closing of the sales of these securities under the Amended SPA occurred on May 15, 2023 (the "Third Closing Date").

On May 15, 2023, the Company entered into an amendment ("Amendment No. 5 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 and April 15, 2023, issued in connection with a private placement financing the Company completed on July 6, 2022 (the "First Closing") to extend the date of the completion of the Uplist Transaction from May 15, 2023 to June 15, 2023. In connection with Amendment No. 5 to the 2022 Notes, the Series Note Amendments Termination Date set forth under Amendment No. 1 to the Series 1 Unsecured Convertible Promissory Notes and Amendment No. 1 of the Series 2 Unsecured Convertible Promissory Notes was automatically extended from May 15, 2023 to June 15, 2023.

On May 15, 2023, the Company also entered into an amendment ("Amendment No. 5 to the Second Notes" and, together with Amendment No. 5 to the First Notes, "Amendment No. 5 to the 2022 Notes") with the holders of the Company's outstanding Second Notes, as amended on February 14, 2023, March 10, 2023, March 15, 2023 and April 15, 2023 issued in connection with a private placement financing the Company completed on January 18, 2023 (the "Second Closing") to extend the date of the completion of the Uplist Transaction from May 15, 2023 to June 15, 2023.

As a result of the entry into Amendment No. 5 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 May 15, 2023 to June 15, 2023. Also, on May 15, 2023, in connection with Amendment No. 5 to the 2022 Notes, the Series Note Amendments Termination Date set forth under Amendment No. 1 to the Series 1 Unsecured Convertible Promissory Notes and Amendment No. 1 of the Series 2 Unsecured Convertible Promissory Notes was automatically extended from May 15, 2023 to June 15, 2023.

On May 18, 2023, the Company received an additional advance from a third party of $350,000, which is expected to be rolled into an anticipated near-term capital raise not related to the prior 2022 Convertible Note Offering.

Results of Operations

The following discussion of our results of operations should be read together with the unaudited interim 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, 2023 Compared to Three Months Ended March 31, 2022

	March 31, 2023 ($)	March 31, 2022 ($)	Increase (Decrease) ($)
Revenue	16,654	3,130	13,524
Operating Expense:			
Cost of revenues	18,718	17,430	1,288
Selling, general and administrative	1,252,786	1,208,910	43,876
Research and development	170,634	527,656	(357,022)
Loss from Operations	(1,425,484)	(1,750,866)	(325,382)
Other Income	523,007	960,548	(437,541)
Net loss	(902,477)	(790,318)	112,159

Revenue

Revenue for the three months ended March 31, 2023 was $16,654, an increase of $13,524 compared to revenue of $3,130 for the three months ended March 31, 2022. Revenue for the three months ended March 31, 2023 and 2022 was the result of transactions into VA Hospitals through our distribution partner, Lovell Government Services ("LGS").

Cost of Revenue

Cost of revenue during the three months ended March 31, 2023 was $18,718, an increase of $1,288 compared to cost of revenue of $17,430 for the three months ended March 31, 2022. Cost of revenue includes product costs, third party warehousing, overhead allocation, royalty and shipping costs.

Selling, General and Administrative Expense

Selling, general and administrative expense during the three months ended March 31, 2023 was $1,252,786, an increase of $43,876 compared to $1,208,910 for the three months ended March 31, 2022. The increase in selling, general and administrative expense for the three months ended March 31, 2023 is primarily attributable to an increase in consulting cost.

Research and Development Expense

Research and development expense during the three months ended March 31, 2023 was $170,634 a decrease of $357,022 compared to $527,656 for the three months ended March 31, 2022. The decrease in research and development expense is primarily attributable to a decrease in compensation costs attributed to a reduction in headcount.

Other (Expense) Income

Other income during the three months ended March 31, 2023 was $523,007, a decrease of $437,541 compared to other income of $960,548 for the three months ended March 31, 2022. The decrease in other income is primarily attributed to an increase in interest expense related to the 2022 Notes and Second Notes offset by a gain for the extinguishment of the Series G warrants and Series H warrants derivative liabilities during the three months ended March 31, 2023 and the impact of the expiration of the Series F warrants during the three months ended March 31, 2022.

Six Months Ended March 31, 2023 Compared to Six Months Ended March 31, 2022

	March 31, 2023 ($)	March 31, 2022 ($)	Increase (Decrease) ($)
Revenue	22,914	7,826	15,088
Operating Expense:			
Cost of revenues	36,353	34,223	2,130
Selling, general and administrative	2,355,701	2,472,013	(116,312)
Research and development	332,087	762,274	(430,187)
Loss from Operations	(2,701,227)	(3,260,684)	559,457
Other (Expense) Income	(1,306)	920,219	921,525
Net loss	(2,702,533)	(2,340,465)	362,068

Revenue

Revenue for the six months ended March 31, 2023 was $22,914, an increase of $15,088 compared to revenue of $7,826 for the six months ended March 31, 2022. Revenue for the six months ended March 31, 2023 and 2022 was primarily the result of transactions into VA Hospitals through our distribution partner, LGS.

Cost of Revenue

Cost of revenue during the six months ended March 31, 2023 was $36,353, an increase of $2,130 compared to cost of revenue of $34,223 for the six months ended March 31, 2022. Cost of revenue includes product costs, third party warehousing, overhead allocation, royalty and shipping costs.

Selling, General and Administrative Expense

Selling, general and administrative expense during the six months ended March 31, 2023 was $2,355,701, a decrease of $116,312 compared to $2,472,013 for the six months ended March 31, 2022. The decrease in selling, general and administrative expense for the six months ended March 31, 2023 is primarily attributable to a decrease in compensation costs attributed to a reduction in headcount partially offset by an increase in consulting costs.

Research and Development Expense

Research and development expense during the six months ended March 31, 2023 was $332,087 a decrease of $430,187 compared to $762,274 for the six months ended March 31, 2022. The decrease in research and development expense is primarily attributable to a decrease in compensation costs attributed to a reduction in headcount.

Other (Expense) Income

Other expense during the six months ended March 31, 2023 was $1,306 an increase of $921,525 compared to other income of $920,219 for the six months ended March 31, 2022. The increase in other (expense) income is primarily attributed to an increase in interest expense related to the 2022 Notes and Second Notes offset by a gain for the extinguishment of the Series G warrants and Series H warrants derivative liabilities during the three months ended March 31, 2023 and the impact of the expiration of the Series F warrants during the three months ended March 31, 2022.

Liquidity and Capital Resources

In the first 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 borrowings and the issuance of convertible debt and units consisting of Common Stock and warrants to fund our operations.

Working Capital

At March 31, 2023, we had total current assets of $1,588,228 (including cash of $29,495) and working capital deficit of $6,390,589. Our working capital as of March 31, 2023 and September 30, 2022 are summarized as follows:

	March 31, 2023	September 30, 2022
Total Current Assets	$ 1,588,228	$ 2,598,195
Total Current Liabilities	7,978,817	3,320,494
Working Capital deficit	$ (6,390,589)	$ (722,299)

Total current assets as of March 31, 2023 were $1,588,228, a decrease of $1,009,967 compared to $2,598,195 as of September 30, 2022. The decrease in current assets is primarily attributable to selling, general and administrative expense and research and development expense incurred in connection with activities to develop our primary product candidate. Our total current assets as of March 31, 2023 and September 30, 2022 were comprised primarily of cash, inventory and prepaid expenses and other current assets.

Total current liabilities as of March 31, 2023 were $7,978,817, an increase of $4,658,323 compared to $3,320,494 as of September 30, 2022. The increase is primarily due to an increase in accounts payable, the current portion of the Series 2 Convertible Notes, the current portion of the 2022 Notes, current portion of the Unsecured convertible notes, which includes both the Second Notes and the Exchanged Notes, and the accrued interest associated with these notes partially offset by a decrease to the amount owed in connection with the financing of certain insurance premiums and the decrease in the fair value of the derivative liability resulting from the exchange of the Series G warrants into common stock.

Cash Flow for the Six months Ended March 31, 2023 Compared to the Six Months Ended March 31, 2022

	March 31, 2023	March 31, 2022
Cash Used in Operating Activities	$ (1,249,931)	$ (2,212,234)
Cash Provided by Financing Activities	532,486	-
Net decrease in Cash	$ (717,445)	$ (2,212,234)

Cash Used in Operating Activities

Cash used in operating activities decreased by $962,303 to $1,249,931 during the six months ended March 31, 2023, compared to $2,212,234 during the six months ended March 31, 2022. The decrease in cash used in operating activities is primarily attributable the Company managing expenses and an increase in accounts payable and accrued interest.

Cash Used in Financing Activities

Cash provided by financing activities increased by $532,486 during the six months ended March 31, 2023, compared to no cash used in financing activities during the six months ended March 31, 2022. For the six months ended March 31, 2023, the cash provided by financing activities was attributable to the Second Closing of 2022 Convertible Note Offering and shareholder advances, which was partially offset by payments made in connection with the financing of certain insurance premiums.

Cash Requirements

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

In the first quarter of 2021, the Company commenced commercial sales of our first product, AC5® Advanced Wound System. That revenue will not be sufficient to fund our business operations and we will need to obtain additional funding from external sources for the foreseeable future. We do not have any commitments for future capital. Significant additional financing will be required to fund our planned operations in the near term and in future periods, including research and development activities relating to our potential new product candidates, seeking regulatory approval of any other product candidates we may choose to develop, commercializing any product candidates for which we are able to obtain regulatory approval or certification, seeking to license or acquire new assets or businesses, and maintaining our intellectual property rights and pursuing rights to new technologies. We may not be able to obtain additional financing on commercially reasonable or acceptable terms when needed, or at all. We are bound by certain contractual terms and obligations that may limit or otherwise impact our ability to raise additional funding in the near-term including, but not limited to, provisions in the 2018 SPA (see Note 7) and the 2022 SPA (see Note 12) restricting our ability to effect or enter into an agreement to effect any issuance by the Company or any of its subsidiaries of Common Stock or securities convertible, exercisable or exchangeable for Common Stock (or a combination of units thereof) involving a Variable Rate Transaction. These restrictions and provisions could make it more challenging for us to raise capital through the incurrence of debt or through equity issuances. If we cannot raise the money that we need in order to continue to develop our business, we will be forced to delay, scale back or eliminate some or all of our proposed operations. If any of these were to occur, there is a substantial risk that our business would fail, and our stockholders could lose all of their investments.

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

Going Concern

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

Critical Accounting Policies and Significant Judgments and Estimates

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

Inventories

Inventories are stated at the lower of cost or net realizable value. 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 cost of raw materials, work-in-progress and finished goods and other products are determined on a First in First out (FiFo) basis. When determining net realizable value, appropriate consideration is given to obsolescence, excessive levels, deterioration, and other factors in evaluating net realizable value.

Complex Financial Instruments

The Company does not use derivative instruments to hedge exposures to cash flow, market, or foreign currency risks. The Company evaluates its financial instruments, including warrants, to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. The Company values its derivatives using the Black-Scholes option-pricing model or other acceptable valuation models, including Monte-Carlo simulations. Derivative instruments are valued at inception, upon events such as an exercise of the underlying financial instrument, and at subsequent reporting periods. The classification of derivative instruments, including whether such instruments should be recorded as liabilities, is re-assessed at the end of each reporting period.

The Company reviews the terms of debt instruments, equity instruments, and other financing arrangements to determine whether there are embedded derivative features, including embedded conversion options that are required to be bifurcated and accounted for separately as a derivative financial instrument. Additionally, in connection with the issuance of financing instruments, the Company may issue freestanding options and warrants, including options or warrants to non-employees in exchange for consulting or other services performed.

The Company accounts for its common stock warrants in accordance with Accounting Standards Codification ("ASC") 815,*Derivatives and Hedging* ("ASC 815"). Based upon the provisions of ASC 815, the Company accounts for common stock warrants as liabilities if the warrant requires net cash settlement or gives the holder the option of net cash settlement, or it fails the equity classification criteria. The Company accounts for common stock warrants as equity if the contract requires physical settlement or net physical settlement or if the Company has the option of physical settlement or net physical settlement and the warrants meet the requirements to be classified as equity. Common stock warrants classified as liabilities are initially recorded at fair value on the grant date and remeasured at fair value each balance sheet date with the offset adjustments recorded in change in fair value of warrant liability within the consolidated statements of operations. Common stock warrants classified as equity are initially measured at fair value on the grant date and are not subsequently remeasured.

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*"). We believe, that as of September 30, 2022.there existed a material weakness in our internal control over financial reporting. The deficiencies in the design of internal control over financial reporting related to a lack of sufficient resources with an understanding of the technical guidance under generally accepted accounting principles related to accounting for complex financial instruments within the 2022 Notes and certain accounting practices relating to the recording of the insurance premium advanced by a third party. Accordingly, the Audit Committee in consultation with management has determined that these matters may be best addressed by: (i) reviewing accounting literature and other technical materials to ensure that the appropriate personnel have a full awareness and understanding of the applicable accounting pronouncements and how they are to be implemented; (ii) additional education on new and existing accounting pronouncements and their application and (iii) requiring senior accounting staff and outside consultants with technical accounting experience to review complex transactions to evaluate and approve the accounting treatment of such transactions. Accordingly, the Board has recommended to management and management has agreed that the Company's accounting staff, including its Chief Financial Officer, undertake additional training on an accelerated basis and that such training, in view of the complexity of certain generally accepted accounting principles and other matters be ongoing and engage third party specialists on an as-needed basis to help supplement the Company's internal resources. During the quarter ended March 31, 2023 the Company engaged in active discussions with outside consultants with technical accounting expertise to review complex transactions and to evaluate the accounting treatment of such transactions. The parties remain in discussion to undertake a formal engagement which it expects to execute prior to the completion of the quarter ending June 30, 2023.

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, 2023, that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting. From time to time, we make changes to our internal control over financial reporting that are intended to enhance its effectiveness, and which do not have a material effect on our overall internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

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

Item 1A. Risk Factors

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

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

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

Not applicable

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

On July 8, 2022, we entered into a Securities Purchase Agreement, dated July 6, 2022 ("2022 SPA"), with certain institutional and accredited individual investors (collectively, the "Investors") for the issuance and sale by us to the Investors of convertible promissory notes, warrants to purchase shares of common stock, and shares of common stock (the "2022 Convertible Note Offering"). The first closing of the 2022 Convertible Note Offering occurred on July 6, 2022. The Second Closing of the 2022 Convertible Note Offering occurred on January 18, 2023.

On May 15, 2023, we entered into Amendment No. 2 to the 2022 SPA (the "Amendment" and, together with the 2022 SPA, the "Amended 2022 SPA"), with an Investor in connection with the third closing of the 2022 Convertible Note Offering for the issuance and sale by us to such Investors of an aggregate of (i) Unsecured Convertible Promissory Notes (each a "Third Note" and collectively, the "Third Notes") in the aggregate principal amount of $702,720, which includes an aggregate $214,720 original issue discount in respect of the Third Notes; (ii) warrants (the "Third Warrants") to purchase an aggregate of 141,396 shares (the "Third Warrant Shares") of common stock; and (iii) 10,608 shares of common stock (the "Third Inducement Shares"). The aggregate gross proceeds for the sale of the Third Notes, Third Warrants and Third Inducement Shares was approximately $488,000 before deducting the estimated fees and offering expenses payable by us. The third closing of the sales of these securities under the Amended SPA occurred on May 15, 2023 (the "Third Closing Date").

Use of Proceeds

The net proceeds to us from the Third Closing of the 2022 Convertible Note Offering, after deducting our estimated fees and offering expenses and excluding the proceeds, if any, from the conversion of the Third Notes and the exercise of the Third Warrants, was approximately $488,000. We intend to use the net proceeds from the Third Closing of the 2022 Convertible Note Offering primarily for working capital and general corporate purposes, and we have not allocated specific amounts for any specific purposes.

Third Notes

The Third Notes become due and payable on January 6, 2024 (the "Maturity Date") 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 Third 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 Third 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 Third Closing Date until the Third 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 Third Notes. Any amount of principal or interest on the Third 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 "Default Interest").

The Third Notes are convertible into an aggregate of 76,884 shares of common stock (such shares of common stock, the "Conversion Shares") at the option of each holder of the Third Notes from the Third Closing Date at the Conversion Price (as defined below) through the later of (i) the Maturity Date and (ii) the date of payment of the Default Amount (as defined in the Third Note); *provided, however*, certain Third 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 our 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 common stock (the "Notes Ownership Limitation") immediately after giving effect to the Conversion; and *provided further*, the holder, upon notice to us, 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 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 Third 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 we fail to deliver the shares of common stock issuable upon a conversion by the Deadline (as defined in the Third Notes), then we are obligated to pay such Third Note holder $5,000 per day in cash for each day beyond the Deadline.

The Third Notes contain customary events of default, which include, among other things, (i) our failure to pay when due any principal or interest payment under the Third Notes; (ii) the insolvency of the Company; (iii) delisting of our common stock; (iv) our breach of any material covenant or other material term or condition under the Third Notes; and (v) our breach of any representations or warrants under the Third Notes which cannot be cured within five (5) days. Further, events of default under the Third Notes also include (i) the unavailability of Rule 144 on or after six (6) months after each Third Note's issuance date; (ii) our failure to deliver the shares of common stock to the Third Note holder upon exercise by such holder of its conversion rights under the Third Note; (iii) our loss of the "bid" price for our common stock and/or a market and such loss is not cured during the specified cure periods; and (iv) our failure to complete an uplist to any of the Nasdaq Global Market, Nasdaq Capital Market, New York Stock Exchange or NYSE American by June 15, 2023 (an "Uplist Transaction").

Upon an event of default, the Third Notes shall become immediately due and payable and we shall pay to each Third Note holder an amount equal to 125% (the "Default Premium") multiplied by the sum of the outstanding principal amount of the Third Notes plus any accrued and unpaid interest on the unpaid principal amount of the Third Notes to the date of payment, plus any Default Interest and any other amounts owed to the Holder under the Amended SPA (the "Default Amount"); *provided that*, upon any subsequent event of default not in connection with the first event of default, such holder shall be entitled to an additional five percent (5%) to the Default Premium for each subsequent event of default. At the election of each Third Note holder, the Default Amount may be paid in cash or shares of common stock equal to the Default Amount divided by the Conversion Price at the time of payment.

Third Warrants

The Third 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 Third Warrant if, as a result of the exercise of the Third Warrant, the holder, together with its affiliates and any other persons whose beneficial ownership of 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 common stock (the "Warrant Ownership Limitation") immediately after giving effect to the exercise of the Third Warrant. The holder, upon notice to us, may increase or decrease the Warrant Ownership Limitation; *provided that* (i) the Warrant Ownership Limitation may only be increased to a maximum of 9.99% of the outstanding shares of common stock; and (ii) any increase in the Warrant Ownership Limitation will not become effective until the 61st day after delivery of such waiver notice. The number of shares of common stock into which each of the Third Warrants is exercisable and the exercise price therefor are subject to adjustment as set forth in the Third Warrants, including adjustments for stock subdivisions or combinations (by any stock split, stock dividend, recapitalization, reorganization, scheme, arrangement or otherwise).

Second Amended and Restated Registration Rights Agreement

On May 15, 2023, we entered into an amendment (the "Second A&R Registration Rights Agreement") to that certain Amended and Restated Registration Rights Agreement, dated as of January 18, 2023, as amended on April 15, 2023, by and among us and certain institutional and accredited individual investors (as amended, the "A&R Registration Rights Agreement"). Under the Second 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 in the Third Closing.

Note Modification Agreements

On May 15, 2023, we entered into an amendment ("Amendment No. 5 to the First Notes") with the holders of our outstanding 2022 Notes, as amended on February 14, 2023, March 10, 2023, March 15, 2023 and April 15, 2023, issued in connection with a private placement financing completed on July 6, 2022 (the "First Closing"). On May 15, 2023, we also entered into an amendment ("Amendment No. 5 to the Second Notes" and, together with Amendment No. 5 to the First Notes, "Amendment No. 5 to the 2022 Notes") with the holders of our outstanding Second Notes, as amended on February 14, 2023, March 10, 2023, March 15, 2023 and April 15, 2023, issued in connection with a private placement financing completed on January 18, 2023 (the "Second Closing").

Under Amendment No. 5 to the 2022 Notes, the 2022 Notes and Second Notes were amended to extend the date of the completion of the Uplist Transaction from May 15, 2023 to June 15, 2023. As a result of the entry into Amendment No. 5 to the 2022 Notes, and pursuant to the terms of our outstanding Exchanged Notes, the Exchanged Notes were automatically amended to extend the date of completion of an Uplist Transaction from May 15, 2023 to June 15, 2023. In addition, as a result of Amendment No. 5 to the 2022 Notes, each of the First Note Amendment Termination Date set forth in the 2022 Notes, the Second Note Amendment Termination Date set forth in the Second Notes, and the Series Note Amendments Termination Date set forth Amendment No. 1 to the Series 1 Unsecured Convertible Promissory Notes and Amendment No. 1 of the Series 2 Unsecured Convertible Promissory Notes was automatically extended from May 15, 2023 to June 15, 2023.

Certain Restrictions on Activities

The Amended SPA contains certain restrictions on our ability to conduct subsequent sales of its equity securities and certain business activities. In particular, commencing on the Third Closing Date and until (A) the payment of the Third Notes in full, or full conversion of the Third Notes, and (B) exercise of the Third Warrants in full, we will be prohibited from (i) changing the nature of business, (ii) selling, divesting, acquiring, or changing the structure of any material assets other than in the ordinary course of business; or (iii) negotiating or entering into any variable rate debt transactions that does not contain a floor price that is more than 50% of the closing price of the common stock on the trading day immediately prior to the Third Closing Date; in each instance without each Third Warrant holder's prior written consent, which shall not be unreasonably withheld.

The issuance and sale of the Third Notes, Conversion Shares, Third Warrants, Warrant Shares, and Inducement Shares (collectively, the "Securities") has not been, and upon issuance was not, registered under the Securities Act, and the Securities may not be offered or sold in the United States absent registration under or exemption from the Securities Act and any applicable state securities laws. The Securities will be issued and sold in reliance upon an exemption from registration afforded by Section 4(a)(2) of the Securities Act and Rule 506(b) promulgated under the Securities Act based on the following facts: each of the applicable Investors has represented that it is an accredited investor as defined in Rule 501 promulgated under the Securities Act; that it is acquiring the Securities for its own account and not with a view towards, or for resale in connection with, the public sale or distribution thereof in violation of applicable securities; we used no advertising or general solicitation in connection with the issuance and sale of the Securities to the applicable Investors; and the Securities will be issued as restricted securities.

Receipt of Additional Shareholder Advance

On May 18, 2023, the Company received an additional advance from a third party of $350,000, which is expected to be rolled into an anticipated near-term capital raise not related to the prior 2022 Convertible Note Offering.

Item 6. Exhibits

Exhibit No.	Exhibit Title	Filed Herewith	Incorporated by Reference			
			Form	Exhibit No.	File No.	Filing Date
10.1	Form of Amendment No.2 to Securities Purchase Agreement*	X				
10.2	Form of Third Note	X				
10.3	Form of Third Warrant	X				
10.4	Form of Second A&R Registration Rights Agreement	X				
10.5	Form of Amendment No. 5 to the First Notes	X				
10.6	Form of Amendment No. 5 to the Second Notes	X				
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) under the Securities and Exchange Act of 1934	X				
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) under the Securities and Exchange Act of 1934	X				
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, executed by Terrence W. Norchi, President and Chief Executive Officer, and Michael S. Abrams, Chief Financial Officer and Treasurer	X				
101.INS	Inline XBRL Instance Document					
101.SCH	Inline XBRL Taxonomy Extension Schema Document					
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					
104	Cover Page Interactive Data File (Embedded within the Inline XBRL document and included in Exhibit 101)					

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

SIGNATURE

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

ARCH THERAPEUTICS, INC.

Date: May 22, 2023

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

Date: May 22, 2023

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

Exhibit 10.1

Certain identified information has been excluded from this exhibit because it is both (i)not material and (ii) would likely cause competitive harm to the registrant if publicly disclosed. [***] indicates that information has been redacted.

AMENDMENT NO. 2
TO
SECURITIES PURCHASE AGREEMENT

This Amendment No. 2 to the Securities Purchase Agreement (this "**Amendment**") is made and entered into effective May 15, 2023 (the "**Amendment No. 2 Effective Date**") between Arch Therapeutics, Inc., a Nevada corporation (the "**Company**"), and the Consenting Stockholders (as defined below). Capitalized terms not defined herein shall have the same meaning as set forth in the Securities Purchase Agreement (as defined below).

RECITALS:

WHEREAS, the Company and each buyer identified on the signature pages thereto (each, including its successors and assigns, a "**Buyer**" and collectively, the "**Buyers**") entered into the Securities Purchase Agreement dated as of July 6, 2022, as amended on January 18, 2023 (as amended, the "**Securities Purchase Agreement**"), pursuant to which, upon the terms and subject to the conditions contained therein, the Company agreed to issue and sell, and each Buyer, severally and not jointly, agreed to purchase from the Company the Notes and the Warrants;

WHEREAS, pursuant to Section 7(e), the Securities Purchase Agreement may be amended in a written instrument signed by the Company, the Lead Investor, and Buyers which purchased at least 50% plus $1.00 of the Notes based on the initial Principal Amounts thereunder (the Lead Investor and such Buyers, collectively the "**Consenting Stockholders**"); and

WHEREAS, the Company and the Consenting Stockholders desire to (a) increase the Maximum Amount of Notes sold and purchased pursuant to the Securities Purchase Agreement; (b) amend the Securities Purchase Agreement to cover the Third Closing (as defined below); (c) include the Third Closing Schedule of Buyers attached hereto as Schedule A to the Securities Purchase Agreement as the Third Closing Schedule of Buyers; (d) include the Form of Third Note (as defined below) attached hereto as Exhibit H to the Securities Purchase Agreement as Exhibit H; and (e) include the Form of Third Warrant (as defined below) attached hereto as Exhibit I to the Securities Purchase Agreement as Exhibit I.

NOW, THEREFORE, for due and adequate consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

1. Clause B of the Recitals of the Securities Purchase Agreement shall be amended and restated as follows:

"WHEREAS, subject to the terms and provisions hereinafter set forth and upon the terms and subject to the limitations and conditions set forth in the Notes (as defined below), (i) each Buyer, severally and not jointly, desires to purchase, and the Company desires to sell and issue to Buyers, (a) senior secured convertible promissory notes, each in the form attached hereto as Exhibit A (the "**First Notes**") convertible into shares of common stock, $0.001 par value per share, of the Company (the "**Common Stock**"), and (b) warrants, each in the form attached hereto as Exhibit B (the "**First Warrants**"), (the "**First Closing**"), and (ii) certain Buyers, severally and not jointly, desire to purchase, and the Company desires to sell and issue to such Buyers, (a) unsecured convertible promissory notes, each in the form attached hereto as Exhibit F (the "**Second Notes**") convertible into Common Stock, and (b) warrants, each in the form attached hereto as Exhibit G (the "**Second Warrants**"), (the "**Second Closing**"), and (iii) certain Buyers, severally and not jointly, desire to purchase, and the Company desires to sell and issue to such Buyers, (a) unsecured convertible promissory notes, each in the form attached hereto as Exhibit H (the "**Third Notes**") convertible into Common Stock, and (b) warrants, each in the form attached hereto as Exhibit I (the "**Third Warrants**"), (the "**Third Closing**"), and (iv) each Buyer, severally and not jointly, may desire to purchase and the Company may desire to sell and issue to Buyers, (a) one or more additional convertible promissory notes convertible into Common Stock, each in the form attached hereto as either (1) Exhibit A, Exhibit F, or Exhibit H, or (2) in such form to be mutually agreed upon by the Company, the Lead Investor (as defined below) and the participating Buyers (the "**Additional Notes**" and together with the First Notes, Second Notes, and Third Notes, the "**Notes**"), and (b) one or more additional warrants, each in the form attached hereto as either (1) Exhibit B, Exhibit G, or Exhibit I, or (2) such form to be mutually agreed upon by the Company, the Lead Investor and the participating Buyers (the "**Additional Warrants**", and together with the First Warrants, Second Warrants, and Third Warrants, the "**Warrants**"), as may mutually be agreed in additional closings as set forth in Section 1(d) below (together with the Second Closing and Third Closing, the "**Additional Closings**") (each of the First Closing, the Second Closing, the Third Closing, and the Additional Closings are sometimes hereinafter individually referred to as a "**Closing**" and collectively as the "**Closings**" and this Agreement and any and all documents or instruments executed or to be executed by in connection with this Agreement, including the Notes, the Warrants, the Security Agreement, in the form attached as Exhibit C hereto (the "**Security Agreement**"), the Guaranty, in the form attached as Exhibit D hereto (the "**Guaranty**"), the Registration Rights Agreement, in the form attached as Exhibit E hereto (as amended and restated from time to time, the "**Registration Rights Agreement**") and the Irrevocable Transfer Agent Instructions, together with all modifications, amendments, extensions, future advances, renewals, and substitutions thereof are sometimes hereinafter individually referred to as a "**Transaction Document**" and collectively as the "**Transaction Documents**")."

2. Clause C of the Recitals of the Securities Purchase Agreement shall be amended and restated as follows:

"WHEREAS, the aggregate principal amount of Notes sold pursuant to this Agreement shall not exceed Five Million Eight Hundred Seventy Five Thousand No/100 United States Dollars (US$5,875,000) (the "**Maximum Amount**"), which amount can be increased by mutual agreement of the Company, [***] (the "**Lead Investor**"), and the Buyers that are majority-in-interest holders of the outstanding Notes."

3. Section 1(b) of the Securities Purchase Agreement shall be amended and restated as follows:

"First Closing; Second Closing; Third Closing. (i) The First Closing of the purchase and sale of the First Notes in an aggregate principal amount of Four Million Two Hundred Thirty Thousand No/100 United States Dollars (US$4,230,000.00), and First Warrants for an aggregate purchase price of Three Million Five Hundred and Twenty Five Thousand and No/100 United States Dollars (US$3,525,000.00), Five Hundred and Seventy Five Thousand and No/100 United States Dollars (US$575,000.00) of which was funded to the Company prior to the date hereof, and shall take place on the Effective Date, subject to satisfaction of the conditions to the First Closing set forth in this Agreement (the "**First Closing Date**"). Subject to the satisfaction (or waiver) of the terms and conditions of this Agreement, in respect of the First Closing Date each Buyer shall purchase (i) a First Note in the principal amount set forth opposite such Buyer's name in column (3) on the Schedule of Buyers attached hereto for (x) a purchase price set forth opposite such Buyer's name in column (4) on the Schedule of Buyers hereto, or (y) in the case of each Prior Series Holder, the surrender of a Series Note in respect of which the amount owing thereunder is forth opposite such Prior Series Holder's name in column (4) on the Schedule of Buyers hereto, and (ii) a First Warrant initially entitling the applicable Buyer to purchase a number of shares of Common Stock equal to the principal amount of such Buyer's First Note divided by the closing price of the Common Stock on the Trading Day immediately prior the First Closing Date.

(ii) The Second Closing of the purchase and sale of the Second Notes in an aggregate principal amount of Six Hundred Thirty Six Thousand and No/100 United States Dollars (US$636,000.00), and Second Warrants for an aggregate purchase price of Five Hundred Thirty Thousand and No/100 United States Dollars (US$530,000.00), Four Hundred Forty Six Thousand Six Hundred Sixty Seven No/100 United States Dollars (US$446,667.00) of which was funded to the Company prior to the date hereof, and shall take place on the Amendment Effective Date, subject to satisfaction of the conditions to the Second Closing set forth in this Agreement (the "**Second Closing Date**"). Subject to the satisfaction (or waiver) of the terms and conditions of this Agreement, in respect of the Second Closing Date each Buyer shall purchase (i) a Second Note in the principal amount set forth opposite such Buyer's name in column (3) on the Second Closing Schedule of Buyers attached hereto for a purchase price set forth opposite such Buyer's name in column (4) on the Second Closing Schedule of Buyers hereto, and (ii) a Second Warrant initially entitling the applicable Buyer to purchase a number of shares of Common Stock equal to two times the principal amount of such Buyer's Second Note divided by $9.94.

(iii) The Third Closing of the purchase and sale of the Third Notes in an aggregate principal amount of Seven Hundred Two Thousand Seven Hundred Twenty and No/100 United States Dollars (US$702,720.00), and Third Warrants for an aggregate purchase price of Five Hundred Eighty Five Thousand Six Hundred and No/100 United States Dollars (US$585,600.00), all of which was funded to the Company prior to the date hereof, and shall take place on the Amendment No. 2 Effective Date, subject to satisfaction of the conditions to the Third Closing set forth in this Agreement (the "**Third Closing Date**"). Subject to the satisfaction (or waiver) of the terms and conditions of this Agreement, in respect of the Third Closing Date each Buyer shall purchase (i) a Third Note in the principal amount and with an issuance date as set forth opposite such Buyer's name in column (3) and (5), respectively, on the Third Closing Schedule of Buyers attached hereto for a purchase price set forth opposite such Buyer's name in column (4) on the Third Closing Schedule of Buyers hereto, and (ii) a Third Warrant dated as set forth opposite such Buyer's name in column (5) on the Third Closing Schedule of Buyers and initially entitling the applicable Buyer to purchase a number of shares of Common Stock equal to two times the principal amount of such Buyer's Third Note divided by $9.94.

(iv) Additional Closings, if any, of the purchase and sale of the Additional Notes and Additional Warrants shall be at such times and for such amounts as determined in accordance with Section 1(d) below, subject to satisfaction of the conditions to the Additional Closings set forth in this Agreement (the " **Additional Closing Dates**", collectively, with the First Closing Date, the Second Closing Date, and the Third Closing Date, are referred to as the "**Closing Dates**"). The Closings shall occur on the respective Closing Dates through the use of overnight mails, electronic email and subject to customary escrow instructions from Buyers and their respective counsel, or in such other manner as is mutually agreed to by the Company and the Buyers."

4. The reference to "1,292,755" in Section 3(c) of the Securities Purchase Agreement shall be replaced with "2,070,531."

5. Section 4(a) of the Securities Purchase Agreement shall be amended and restated as follows:

"Best Efforts. The parties shall use their commercially reasonable best efforts to satisfy timely each of the conditions described in Sections 5 and 6 of this Agreement. In addition, the Company shall use its commercially reasonable best efforts to complete the Uplist Transaction (as defined in the Registration Rights Agreement) by June 15, 2023."

6. Section 4(k) of the Securities Purchase Agreement shall be amended and restated as follows:

"Restriction on Activities. (i) Commencing as of the Effective Date, and until the sooner of (1) the six month anniversary of the date first written above or (2)(I) payment of the First Notes in full, or full conversion of the First Notes, and (II) exercise First Warrants in full, the Company shall not, directly or indirectly, without each Buyer's prior written consent, which consent shall not be unreasonably withheld: (a) change the nature of its business; (b) sell, divest, acquire, change the structure of any material assets other than in the ordinary course of business; or (c) solicit any offers for, respond to any unsolicited offers for, or conduct any negotiations with any other person or entity in respect of any variable rate debt transactions (i.e., transactions where the conversion or exercise price of the security issued by the Company varies based on the market price of the Common Stock) that does not contain a floor price that is more than 50% the closing price of the Common Stock on the Trading Day immediately prior to the date hereto, whether a transaction similar to the one contemplated hereby or any other investment.

(ii) Commencing as of the Amendment Effective Date, and until (1) the payment of the Second Notes in full, or full conversion of the Second Notes, and (2) exercise of the Second Warrants in full, the Company shall not, directly or indirectly, without the prior written consent of each Buyer who participated in the Second Closing, which consent shall not be unreasonably withheld: (a) change the nature of its business; (b) sell, divest, acquire, change the structure of any material assets other than in the ordinary course of business; or (c) solicit any offers for, respond to any unsolicited offers for, or conduct any negotiations with any other person or entity in respect of any variable rate debt transactions (i.e., transactions where the conversion or exercise price of the security issued by the Company varies based on the market price of the Common Stock) that does not contain a floor price that is more than 50% the closing price of the Common Stock on the Trading Day immediately prior to the date hereto, whether a transaction similar to the one contemplated hereby or any other investment.

(iii) Commencing as of the Amendment No. 2 Effective Date, and until (1) the payment of the Third Notes in full, or full conversion of the Third Notes, and (2) exercise of the Third Warrants in full, the Company shall not, directly or indirectly, without the prior written consent of each Buyer who participated in the Third Closing, which consent shall not be unreasonably withheld: (a) change the nature of its business; (b) sell, divest, acquire, change the structure of any material assets other than in the ordinary course of business; or (c) solicit any offers for, respond to any unsolicited offers for, or conduct any negotiations with any other person or entity in respect of any variable rate debt transactions (i.e., transactions where the conversion or exercise price of the security issued by the Company varies based on the market price of the Common Stock) that does not contain a floor price that is more than 50% the closing price of the Common Stock on the Trading Day immediately prior to the date hereto, whether a transaction similar to the one contemplated hereby or any other investment."

7. Section 4(p) of the Securities Purchase Agreement shall be amended and restated as follows:

"Upon the First Closing, the Company shall pay US$50,000.00 to the Lead Investor's legal counsel for preparation of the Transaction Documents (the '**First Closing Transaction Expense Amounts**") which such amounts shall be offset from the Purchase Price payable by the Lead Investor and shall be paid to the Lead Investor's legal counsel upon the execution hereof. Additionally, for the avoidance of doubt, there shall be an aggregate Seven Hundred and Five Thousand No/100 United States Dollars (US$705,000.00) original issue discount (the "**OID**") in respect of the First Notes. The OID has been included in the aggregate principal amount of the First Notes and as such the aggregate principal amount of First Notes is Four Million Two Hundred Thirty Thousand No/100 United States Dollars (US$4,230,000.00).

Upon the Second Closing, the Company shall pay Fifteen Thousand No/100 United States Dollars (US$15,000.00 to the Lead Investor's legal counsel for preparation of the applicable Transaction Documents (the "**Second Closing Transaction Expense Amounts**" and, collectively with the First Closing Transaction Expense Amounts, the "**Transaction Expense Amounts**") which such amounts shall be offset from the Purchase Price payable by the Lead Investor and shall be paid to the Lead Investor's legal counsel on the Amendment Effective Date. Additionally, for the avoidance of doubt, there shall be an aggregate One Hundred Six Thousand No/100 United States Dollars (US$106,000.00) OID in respect of the Second Notes. The OID has been included in the aggregate principal amount of the Second Notes and as such the aggregate principal amount of Second Notes is Six Hundred Thirty Six Thousand No/100 United States Dollars (US$636,000.00)."

Upon the Third Closing, the Company shall pay Eight Thousand No/100 United States Dollars (US$8,000.00) to the Lead Investor's legal counsel for preparation of the applicable Transaction Documents (the "**Third Closing Transaction Expense Amounts**" and, collectively with the First Closing Transaction Expense Amounts and Second Closing Transaction Expense Amounts, the "**Transaction Expense Amounts**") which such Third Closing Transaction Expense Amounts to be paid by the Company to the Lead Investor's legal counsel on the Amendment No. 2 Effective Date. Additionally, for the avoidance of doubt, there shall be an aggregate One Hundred Seventeen Thousand One Hundred Twenty No/100 United States Dollars (US$117,120.00) OID in respect of the Third Notes. The OID has been included in the aggregate principal amount of the Third Notes and as such the aggregate principal amount of Third Notes is Seven Hundred Two Thousand Seven Hundred Twenty No/100 United States Dollars (US$702,720.00)."

8. Section 4(s) of the Securities Purchase Agreement shall be amended and restated as follows:

"On the date of each Closing the Company shall issue to each Buyer as further consideration for such Buyer agreeing to purchase its Notes, a number of shares of Common Stock (the "**Inducement Shares**") equal to 15% of the principal amount of such Buyer's Note divided by $9.94. With respect to the Inducement Shares issued in the First Closing, Second Closing, and Third Closing each Buyer agrees that prior to the earlier of (i) the date of the listing of the Common Stock on any of the Nasdaq National Market, Nasdaq Small Cap Market, New York Stock Exchange or NYSE MKT, or (ii)(A) December 31, 2022, with respect to the Inducement Shares issued in the First Closing or (ii)(B) February 28, 2023 with respect to the Inducement Shares issued in the Second Closing or (ii)(C) May 31, 2023 with respect to the Inducement Shares issued in the Third Closing, each participating Buyer agrees that it shall not sell more 20% of its Inducement Shares."

9. Section 6(b)(vi) of the Securities Purchase Agreement shall be amended and restated as follows:

"Each Buyer shall have executed a waiver of Section 4.14 of the First Notes and Second Notes and Section 5(p) of the First Warrants and Second Warrants."

10. The Third Closing Schedule of Buyers attached as Schedule A hereto shall be added to the Third Closing Schedule of Buyers of the Securities Purchase Agreement.

11. The Form of Third Note attached as Exhibit H hereto shall be added to Exhibit H of the Securities Purchase Agreement.

12. The Form of Third Warrant attached as Exhibit I hereto shall be added to Exhibit I of the Securities Purchase Agreement.

13. Except as modified by this Amendment, all other terms and conditions in the Securities Purchase Agreement shall remain in full force and effect and this Amendment shall be governed by all provisions thereof, including Section 7(a) regarding governing law. This Amendment may be executed in separate counterparts, all of which taken together shall constitute a single instrument.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized signatories as of the date first indicated above.

ARCH THERAPEUTICS, INC.

By: _____
Name:
Title:

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
SIGNATURE PAGE FOR BUYER FOLLOWS]**ACKNOWLEDGEMENT OF GUARANTOR**

IN WITNESS WHEREOF, the undersigned (the "**Guarantor**") hereby acknowledges and agrees to this Amendment, acknowledges and reaffirms its Obligations owing to the Buyers under its Guaranty, dated July 6, 2022 (as the same may be amended, amended and restated, or supplemented from time to time, the "**Guaranty**"), and agrees that (i) the Guaranty is and shall remain in full force and effect with respect to the Obligations (as defined in the Guaranty) under the Guaranty and (ii) the Obligations of the Guarantor shall include all Notes issued pursuant to this Amendment, including without limitation, the Third Notes.

ARCH BIOSURGERY, INC.

By: _____
Name:
Title:

[BUYER SIGNATURE PAGES TO AMENDMENT]

IN WITNESS WHEREOF, the undersigned have caused this Amendment to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Buyer: _____

Signature of Authorized Signatory of Buyer: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

SCHEDULE A

THIRD CLOSING SCHEDULE OF BUYERS

(1)	(2)	(3)	(4)	(5)
Buyer	**Address**	**Principal Amount of Note**	**Purchase Price of Note**	**Issuance Date**
Oasis Capital, LLC	411 Dorado BCH E Dorado, PR 00646	$115,200.00	$96,000	March 11, 2023
Oasis Capital, LLC	-	$144,000.00	$120,000	March 30, 2023
Oasis Capital, LLC	-	$129,600.00	$108,000	April 11, 2023
Oasis Capital, LLC	-	$115,200.00	$96,000	April 26, 2023
Oasis Capital, LLC	-	$76,320.00	$63,600	April 28, 2023
Oasis Capital, LLC	-	$122,400.00	$102,000.00	May 12, 2023
		Aggregate Principal Amount	**Aggregate Purchase Price**	
		$702,720.00	**$585,600.00**	

EXHIBIT H

FORM OF THIRD NOTE

Attached

EXHIBIT I

FORM OF THIRD WARRANT

Attached

Exhibit 10.2

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

Principal Amount: US$_____ **Issue Date: _____**
Purchase Price: US$_____

UNSECURED CONVERTIBLE PROMISSORY NOTE

FOR VALUE RECEIVED, **ARCH THERAPEUTICS, INC.**, a Nevada corporation (hereinafter called the "Borrower") (Trading Symbol: ARTH), hereby promises to pay to the order of_____, or registered assigns (the "Holder") the sum of US$_____together with any interest as set forth herein, on January 6, 2024 (the "Maturity Date"), and to pay interest on the unpaid principal balance hereof at the rate of ten percent (10%) (the "Interest Rate") per annum from the Issue Date set forth above (the "Issue Date") until the same becomes due and payable, whether at maturity or upon acceleration or by prepayment or otherwise, the entire amount of which interest shall be guaranteed from the Issue Date through the Maturity Date. This Note may not be prepaid in whole or in part except as otherwise explicitly set forth herein with the written consent of the Holder which may be withheld for any reason or for no reason. Any amount of principal or interest on this Note 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 the same is paid (the "Default Interest"). Interest shall commence accruing on the Issue Date and shall be computed on the basis of a 360-day year and the actual number of days elapsed. All payments due hereunder (to the extent not converted into common stock, $0.001 par value per share (the "Common Stock") in accordance with the terms hereof) shall be made in lawful money of the United States of America. All payments shall be made at such address as the Holder shall hereafter give to the Borrower by written notice made in accordance with the provisions of this Note. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a business day, the same shall instead be due on the next succeeding day which is a business day and, in the case of any interest payment date which is not the date on which this Note is paid in full, the extension of the due date thereof shall not be taken into account for purposes of determining the amount of interest due on such date. As used in this Note, the term "business day" shall mean any day other than a Saturday, Sunday or a day on which commercial banks in the city of New York, New York are authorized or required by law or executive order to remain closed. Each capitalized term used herein, and not otherwise defined, shall have the meaning ascribed thereto in that certain Securities Purchase Agreement dated as of July 6, 2022, as amended on January 18, 2023 and again as of May 15, 2023, pursuant to which this Note was originally issued (the "Purchase Agreement").

This Note is free from all taxes, liens, claims and encumbrances with respect to the issue thereof and shall not be subject to preemptive rights or other similar rights of shareholders of the Borrower and will not impose personal liability upon the holder thereof.

The following terms shall also apply to this Note:

ARTICLE I. CONVERSION RIGHTS

1.1 Conversion Right. The Holder shall have the right from time to time, and at any time on or following the Issue Date and ending on the later of (i) the Maturity Date and (ii) the date of payment of the Default Amount (as defined in Article III) pursuant to Section 1.6(a) or Article III, each in respect of the remaining outstanding principal amount of this Note to convert all or any part of the outstanding and unpaid principal amount of this Note into fully paid and non-assessable shares of Common Stock, as such Common Stock exists on the Issue Date, or any shares of capital stock or other securities of the Borrower into which such Common Stock shall hereafter be changed or reclassified at the Conversion Price (as defined below) determined as provided herein (a "Conversion"); provided, however, that in no event shall the Holder be entitled to convert any portion of this Note in excess of that portion of this Note upon conversion of which the sum of (1) the number of shares of Common Stock beneficially owned by the Holder and its affiliates (other than shares of Common Stock which may be deemed beneficially owned through the ownership of the unconverted portion of the Notes or the unexercised or unconverted portion of any other security of the Borrower subject to a limitation on conversion or exercise analogous to the limitations contained herein) and (2) the number of shares of Common Stock issuable upon the conversion of the portion of this Note with respect to which the determination of this proviso is being made, would result in beneficial ownership by the Holder and its affiliates of more than 4.99% of the outstanding shares of Common Stock. For purposes of the proviso to the immediately preceding sentence, beneficial ownership shall be determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Regulations 13D-G thereunder, except as otherwise provided in clause (1) of such proviso, provided, further, however, that the limitations on conversion may be waived by the Holder (up to a maximum of 9.99%) upon, at the election of the Holder, not less than 61 days' prior notice to the Borrower, and the provisions of the conversion limitation shall continue to apply until such 61st day (or such later date, as determined by the Holder, as may be specified in such notice of waiver). The number of shares of Common Stock to be issued upon each conversion of this Note shall be determined by dividing the Conversion Amount (as defined below) by the applicable Conversion Price then in effect on the date specified in the notice of conversion, in the form attached hereto as Exhibit A (the "Notice of Conversion"), delivered to the Borrower by the Holder in accordance with Section 1.4 below; provided that the Notice of Conversion is submitted by facsimile or e-mail (or by other means resulting in, or reasonably expected to result in, notice) to the Borrower before 11:59 p.m., New York, New York time on such conversion date (the "Conversion Date"). The term "Conversion Amount" means, with respect to any conversion of this Note, the sum of (1) the principal amount of this Note to be converted in such conversion plus (2) at the Holder's option, accrued and unpaid interest, if any, on such principal amount at the interest rates provided in this Note to the Conversion Date, provided however, that the Borrower shall have the right to pay any or all interest in cash plus (3) at the Holder's option, Default Interest, if any, on the amounts referred to in the immediately preceding clauses (1) and/or (2) plus (4) at the Holder's option, any amounts owed to the Holder pursuant to Sections 1.3 and 1.4(g) hereof.

1.2 Conversion Price. Subject to the adjustments described herein, the conversion price (the "Conversion Price") shall equal $9.14. If the shares of the Borrower's Common Stock have not been delivered within three (3) business days to the Borrower, the Notice of Conversion may be rescinded. At any time after the Closing Date, if in the case that the Borrower's Common Stock is not deliverable by DWAC (including if the Borrower's transfer agent has a policy prohibiting or limiting delivery of shares of the Borrower's Common Stock specified in a Notice of Conversion), the Borrower shall pay to the Holder $1,000 per each Trading Day following the Closing Date that any such limitation or prohibition exists. If in the case that the Borrower's Common Stock is "chilled" for deposit into the DTC system and only eligible for clearing deposit, an additional $1,000 per each Trading Day shall be payable while the "chill" is in effect. Additionally, if the Borrower ceases to be a reporting company pursuant to the 1934 Act or if the Note cannot be converted into free trading shares after one hundred eighty-one (181) days from the Issue Date, an additional $1,000 per Trading Day shall be payable. "Trading Day" shall mean any day on which the Common Stock is tradable for any period on the OTC Pink, OTCQB or on the principal securities exchange or other securities market on which the Common Stock is then being traded. The Borrower shall be responsible for the fees of its transfer agent and all DTC fees associated with any such issuance. Holder shall be entitled to deduct up to $500.00 from the conversion amount in each Notice of Conversion to cover Holder's deposit fees associated with each Notice of Conversion. In the event of a dispute as to the number of shares of Common Stock issuable to the Holder in connection with a conversion of this Note, the Borrower shall issue to the Holder the number of shares of Common Stock not in dispute and resolve such dispute in accordance with Section 4.13.

1.3 Authorized Shares. The Borrower covenants that during the period the conversion right exists, the Borrower will reserve from its authorized and unissued Common Stock a sufficient number of shares, free from preemptive rights, to provide for the issuance of Common Stock upon the full conversion of this Note issued pursuant to the Purchase Agreement in an amount of at least the Reserved Amount (as defined below). The Borrower is required at all times to have authorized and reserved one and a half (1.5) times the number of shares that is actually issuable upon full conversion of the Note (based on the Conversion Price of the Notes in effect from time to time) (the "Reserved Amount") such that the aggregate amount so reserved for all Notes combined is one and a half (1.5) times the amount needed for all such Notes. The Reserved Amount shall be increased from time to time in accordance with the Borrower's obligations pursuant to Section 3(d) of the Purchase Agreement. The Borrower represents that upon issuance, such shares will be duly and validly issued, fully paid and non-assessable. In addition, if the Borrower shall issue any securities or make any change to its capital structure which would change the number of shares of Common Stock into which the Notes shall be convertible at the then current Conversion Price, the Borrower shall at the same time make proper provision so that thereafter there shall be a sufficient number of shares of Common Stock authorized and reserved, free from preemptive rights, for conversion of the outstanding Notes, in an amount of at least the Reserved Amount. The Borrower (i) acknowledges that it has irrevocably instructed its transfer agent to issue certificates for the Common Stock issuable upon conversion of this Note, and (ii) agrees that its issuance of this Note shall constitute full authority to its officers and agents who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of Common Stock in accordance with the terms and conditions of this Note.

If, at any time the Borrower does not maintain or replenish the Reserved Amount within three (3) business days of the written request of the Holder, the principal amount of the Note shall increase by thirty percent (30%) (under Holder's and Borrower's expectation that any principal amount increase will tack back to the Issue Date).

1.4 Method of Conversion.

(a) Mechanics of Conversion. Subject to Section 1.1, this Note may be converted by the Holder in whole or in part at any time from time to time on or after the Issue Date, by (A) submitting to the Borrower a Notice of Conversion (by facsimile, e-mail or other reasonable means of communication dispatched on the Conversion Date prior to 11:59 p.m., New York, New York time) and (B) subject to Section 1.4(b), surrendering this Note at the principal office of the Borrower.

(b) Surrender of Note Upon Conversion. Notwithstanding anything to the contrary set forth herein, upon conversion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Borrower unless the entire unpaid principal amount of this Note is so converted. The Holder and the Borrower shall maintain records showing the principal amount so converted and the dates of such conversions or shall use such other method, reasonably satisfactory to the Holder and the Borrower, so as not to require physical surrender of this Note upon each such conversion. In the event of any dispute or discrepancy, such records of the Borrower shall, *prima facie,* be controlling and determinative in the absence of manifest error. Notwithstanding the foregoing, if any portion of this Note is converted as aforesaid, the Holder may not transfer this Note unless the Holder first physically surrenders this Note to the Borrower, whereupon the Borrower will forthwith issue and deliver upon the order of the Holder a new Note of like tenor, registered as the Holder (upon payment by the Holder of any applicable transfer taxes) may request, representing in the aggregate the remaining unpaid principal amount of this Note. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of a portion of this Note, the unpaid and unconverted principal amount of this Note represented by this Note may be less than the amount stated on the face hereof.

(c) Payment of Taxes. The Borrower shall not be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock or other securities or property on conversion of this Note in a name other than that of the Holder (or in street name), and the Borrower shall not be required to issue or deliver any such shares or other securities or property unless and until the person or persons (other than the Holder or the custodian in whose street name such shares are to be held for the Holder's account) requesting the issuance thereof shall have paid to the Borrower the amount of any such tax or shall have established to the satisfaction of the Borrower that such tax has been paid.

(d) Delivery of Common Stock Upon Conversion. Upon receipt by the Borrower from the Holder of a facsimile transmission or e-mail (or other reasonable means of communication) of a Notice of Conversion meeting the requirements for conversion as provided in this Section 1.4, the Borrower shall issue and deliver or cause to be issued and delivered to or upon the order of the Holder certificates for the Common Stock issuable upon such conversion within two (2) business days after such receipt (the "Deadline") (and, solely in the case of conversion of the entire unpaid principal amount hereof, surrender of this Note) in accordance with the terms hereof and the Purchase Agreement.

(e) Obligation of Borrower to Deliver Common Stock. Upon receipt by the Borrower of a Notice of Conversion, the Holder shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, the outstanding principal amount and the amount of accrued and unpaid interest on this Note shall be reduced to reflect such conversion, and, unless the Borrower defaults on its obligations under this Article I, all rights with respect to the portion of this Note being so converted shall forthwith terminate except the right to receive the Common Stock or other securities, cash or other assets, as herein provided, on such conversion. If the Holder shall have given a Notice of Conversion as provided herein, the Borrower's obligation to issue and deliver the certificates for Common Stock shall be absolute and unconditional, irrespective of the absence of any action by the Holder to enforce the same, any waiver or consent with respect to any provision thereof, the recovery of any judgment against any person or any action to enforce the same, any failure or delay in the enforcement of any other obligation of the Borrower to the holder of record, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder of any obligation to the Borrower, and irrespective of any other circumstance which might otherwise limit such obligation of the Borrower to the Holder in connection with such conversion. The Conversion Date specified in the Notice of Conversion shall be the Conversion Date so long as the Notice of Conversion is received by the Borrower before 11:59 p.m., New York, New York time, on such date.

(f) Delivery of Common Stock by Electronic Transfer. In lieu of delivering physical certificates representing the Common Stock issuable upon conversion, provided the Borrower is participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer ("FAST") program, upon request of the Holder and its compliance with the provisions contained in Section 1.1 and in this Section 1.4, the Borrower shall use its commercially reasonable best efforts to cause its transfer agent to electronically transmit the Common Stock issuable upon conversion to the Holder by crediting the account of Holder's Prime Broker with DTC through its Deposit Withdrawal At Custodian ("DWAC") system.

(g) DTC Eligibility & Market Loss. If the Borrower fails to maintain its status as "DTC Eligible" for any reason, or, if the Conversion Price is less than $0.01 at any time after the Issue Date, the principal amount of the Note shall increase by twenty percent (20%) (under Holder's and Borrower's expectation that any principal amount increase will tack back to the Issue Date).

(h) Failure to Deliver Common Stock Prior to Delivery Deadline. Without in any way limiting the Holder's right to pursue other remedies, including actual damages and/or equitable relief, the parties agree that if delivery of the Common Stock issuable upon conversion of this Note is not delivered by the Deadline (other than a failure due to the circumstances described in Section 1.3 above, which failure shall be governed by such Section) the Borrower shall pay to the Holder $5,000 per day in cash, for each day beyond the Deadline that the Borrower fails to deliver such Common Stock until the Borrower issues and delivers a certificate to the Holder or credit the Holder's balance account with OTC for the number of shares of Common Stock to which the Holder is entitled upon such Holder's conversion of any Conversion Amount (under Holder's and Borrower's expectation that any damages will tack back to the Issue Date). Such cash amount shall be paid to Holder by the fifth day of the month following the month in which it has accrued or, at the option of the Holder (by written notice to the Borrower by the first day of the month following the month in which it has accrued), shall be added to the principal amount of this Note, in which event interest shall accrue thereon in accordance with the terms of this Note and such additional principal amount shall be convertible into Common Stock in accordance with the terms of this Note. The Borrower agrees that the right to convert is a valuable right to the Holder. The damages resulting from a failure, attempt to frustrate, interference with such conversion right are difficult if not impossible to qualify. Accordingly, the parties acknowledge that the liquidated damages provision contained in this Section 1.4(h) are justified.

(i) Rescindment of a Notice of Conversion. If (i) the Borrower fails to respond to Holder within one (1) business day from the Conversion Date confirming the details of Notice of Conversion, (ii) the Borrower fails to provide any of the shares of the Borrower's Common Stock requested in the Notice of Conversion within two (2) business days from the date of receipt of the Note of Conversion, (iii) if the Holder provides standard and customary documentation, the Holder is unable to procure a legal opinion required to have the shares of the Borrower's Common Stock issued unrestricted and/or deposited to sell for any reason related to the Borrower's standing, (iv) the Holder is unable to deposit the shares of the Borrower's Common Stock requested in the Notice of Conversion for any reason related to the Borrower's standing, other than restrictions under Rule 144, (v) at any time after a missed Deadline, at the Holder's sole discretion, or (vi) if OTC Markets changes the Borrower's designation to 'Limited Information' (Yield), 'No Information' (Stop Sign), 'Caveat Emptor' (Skull & Crossbones), 'OTC', 'Other OTC' or 'Grey Market' (Exclamation Mark Sign) or other trading restriction on the day of or any day after the Conversion Date, the Holder maintains the option and sole discretion to rescind the Notice of Conversion ("Rescindment") with a "Notice of Rescindment." For the avoidance of doubt, no delivery of a Notice of Rescindment shall be deemed to be a waiver of any failure to deliver shares under a Notice of Conversion, has such Notice of Rescindment not otherwise been delivered.

1.5 Concerning the Shares. The shares of Common Stock issuable upon conversion of this Note may not be sold or transferred unless (i) such shares are sold pursuant to an effective registration statement under the Act or (ii) the Borrower or its transfer agent shall have been furnished with an opinion of counsel (which opinion shall be in form, substance and scope customary for opinions of counsel in comparable transactions) to the effect that the shares to be sold or transferred may be sold or transferred pursuant to an exemption from such registration or (iii) such shares are sold or transferred pursuant to Rule 144 under the Act (or a successor rule) ("Rule 144") or (iv) such shares are transferred to an "affiliate" (as defined in Rule 144) of the Borrower who agrees to sell or otherwise transfer the shares only in accordance with this Section 1.5 and who is an Accredited Investor (as defined in the Purchase Agreement). Except as otherwise provided in the Purchase Agreement (and subject to the removal provisions set forth below), until such time as the shares of Common Stock issuable upon conversion of this Note have been registered under the Act or otherwise may be sold pursuant to Rule 144 without any restriction as to the number of securities as of a particular date that can then be immediately sold, each certificate for shares of Common Stock issuable upon conversion of this Note that has not been so included in an effective registration statement or that has not been sold pursuant to an effective registration statement or an exemption that permits removal of the legend, shall bear a legend substantially in the following form, as appropriate:

"NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES."

The legend set forth above shall be removed and the Borrower shall issue to the Holder a new certificate therefore free of any transfer legend if (i) the Borrower or its transfer agent shall have received an opinion of counsel, in form, substance and scope customary for opinions of counsel in comparable transactions, to the effect that a public sale or transfer of such Common Stock may be made without registration under the Act, which opinion shall be reasonably accepted by the Borrower so that the sale or transfer is effected or (ii) in the case of the Common Stock issuable upon conversion of this Note, such security is registered for sale by the Holder under an effective registration statement filed under the Act or otherwise may be sold pursuant to Rule 144 without any restriction as to the number of securities as of a particular date that can then be immediately sold and in each of (i) and (ii) the Borrower shall have a reasonable expectation that the Holder intends to use its commercially reasonable efforts to promptly sell or transfer such Common Stock. In the event that the Borrower does not accept the opinion of counsel provided by the Buyer with respect to the transfer of Securities pursuant to an exemption from registration (provided that such opinion is in a form standard and customary for transactions of such type), such as Rule 144 or Regulation S, at the Deadline, it will be considered an Event of Default pursuant to Section 3.2 of the Note.

1.6 Effect of Certain Events.

(a) Effect of Merger, Consolidation, Etc. At the option of the Holder, the sale, conveyance or disposition of all or substantially all of the assets of the Borrower, the effectuation by the Borrower of a transaction or series of related transactions in which more than 50% of the voting power of the Borrower is disposed of, or the consolidation, merger or other business combination of the Borrower with or into any other Person (as defined below) or Persons when the Borrower is not the survivor then: (i) the Note shall be prepaid in full, including any prepayment penalty then due or (ii) the Note shall be treated pursuant to Section 1.6(b) hereof. "Person" shall mean any individual, corporation, limited liability company, partnership, association, trust or other entity or organization.

(b) Adjustment Due to Merger, Consolidation, Etc. If, at any time when this Note is issued and outstanding and prior to conversion of all of the Notes, there shall be any merger, consolidation, exchange of shares, recapitalization, reorganization, or other similar event, as a result of which shares of Common Stock of the Borrower shall be changed into the same or a different number of shares of another class or classes of stock or securities of the Borrower or another entity, or in case of any sale or conveyance of all or substantially all of the assets of the Borrower other than in connection with a plan of complete liquidation of the Borrower, then the Holder of this Note shall thereafter have the right to receive upon conversion of this Note, upon the basis and upon the terms and conditions specified herein and in lieu of the shares of Common Stock immediately theretofore issuable upon conversion, such stock, securities or assets which the Holder would have been entitled to receive in such transaction had this Note been converted in full immediately prior to such transaction (without regard to any limitations on conversion set forth herein), and in any such case appropriate provisions shall be made with respect to the rights and interests of the Holder of this Note to the end that the provisions hereof (including, without limitation, provisions for adjustment of the Conversion Price and of the number of shares issuable upon conversion of the Note) shall thereafter be applicable, as nearly as may be practicable in relation to any securities or assets thereafter deliverable upon the conversion hereof. The Borrower shall not affect any transaction described in this Section 1.6(b) unless (a) it first gives fifteen (15) days' prior written notice of the record date of the special meeting of shareholders to approve, or if there is no such record date, the consummation of, such merger, consolidation, exchange of shares, reorganization or other similar event or sale of assets (during which time the Holder shall be entitled to convert this Note) and (b) the resulting successor or acquiring entity (if not the Borrower) assumes by written instrument the obligations of this Section 1.6(b). The above provisions shall similarly apply to successive consolidations, mergers, sales, transfers or share exchanges.

(c) Adjustment Due to Distribution. If the Borrower shall declare or make any distribution of its assets (or rights to acquire its assets) to holders of Common Stock as a dividend, stock repurchase, by way of return of capital or otherwise (including any dividend or distribution to the Borrower's shareholders in cash or shares (or rights to acquire shares) of capital stock of a subsidiary (i.e., a spin-off)) (a "Distribution"), then the Holder of this Note shall be entitled, upon any conversion of this Note after the date of record for determining shareholders entitled to such Distribution, to receive the amount of such assets which would have been payable to the Holder with respect to the shares of Common Stock issuable upon such conversion had such Holder been the holder of such shares of Common Stock on the record date for the determination of shareholders entitled to such Distribution.

(d) Reserved.

(e) Purchase Rights. If, at any time when any Notes are issued and outstanding, the Borrower issues any convertible securities or rights to purchase stock, warrants, securities or other property (the "Purchase Rights") pro rata to the record holders of any class of Common Stock, then the Holder of this Note will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which such Holder could have acquired if such Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without regard to any limitations on conversion contained herein) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

(f) Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price as a result of the events described in this Section 1.6, the Borrower, at its expense, shall promptly compute such adjustment or readjustment and prepare and furnish to the Holder a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Borrower shall, upon the written request at any time of the Holder, furnish to such Holder a like certificate setting forth (i) such adjustment or readjustment, (ii) the Conversion Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, of other securities or property which at the time would be received upon conversion of the Note.

1.7 Reserved.

1.8 Status as Shareholder. Upon submission of a Notice of Conversion by a Holder, (i) the shares covered thereby (other than the shares, if any, which cannot be issued because their issuance would exceed such Holder's allocated portion of the Reserved Amount or Maximum Share Amount) shall be deemed converted into shares of Common Stock and (ii) the Holder's rights as a Holder of such converted portion of this Note shall cease and terminate, excepting only the right to receive certificates for such shares of Common Stock and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Borrower to comply with the terms of this Note. Notwithstanding the foregoing, if a Holder has not received certificates for all shares of Common Stock prior to the tenth (10th) business day after the expiration of the Deadline with respect to a conversion of any portion of this Note for any reason, then (unless the Holder otherwise elects to retain its status as a holder of Common Stock by so notifying the Borrower) the Holder shall regain the rights of a Holder of this Note with respect to such unconverted portions of this Note and the Borrower shall, as soon as practicable, return such unconverted Note to the Holder or, if the Note has not been surrendered, adjust its records to reflect that such portion of this Note has not been converted. In all cases, the Holder shall retain all of its rights and remedies (including, without limitation, (i) the right to receive Conversion Default Payments pursuant to Section 1.3 to the extent required thereby for such Conversion Default and any subsequent Conversion Default and (ii) the right to have the Conversion Price with respect to subsequent conversions determined in accordance with Section 1.3) for the Borrower's failure to convert this Note.

1.9 Prepayment. Subject to the terms of this Note, with the prior written approval of the Lead Investor which shall not be unreasonably withheld or delayed and provided that an Event of Default has not occurred under this Note, the Borrower may prepay the amounts outstanding hereunder pursuant to the following terms and conditions:

(a) At any time during the period beginning on the Issue Date and ending on the date which is sixty (60) calendar days following the Issue Date, the Borrower shall have the right, exercisable on not less than three (3) Trading Days prior written notice to the Holder of the Note to prepay the outstanding Note (principal and accrued interest), in full by making a payment to the Holder of an amount in cash equal to 110%, multiplied by the sum of: (w) the then outstanding principal amount of this Note plus (x) accrued and unpaid interest on the unpaid principal amount of this Note plus (y) Default Interest, if any.

(b) At any time during the period beginning on the date which is sixty one (61) calendar days from the Issue Date and ending on the date which is ninety (90) calendar days following the Issue Date, the Borrower shall have the right, exercisable on not less than three (3) Trading Days prior written notice to the Holder of the Note to prepay the outstanding Note (principal and accrued interest), in full by making a payment to the Holder of an amount in cash equal to 115%, multiplied by the sum of: (w) the then outstanding principal amount of this Note plus (x) accrued and unpaid interest on the unpaid principal amount of this Note plus (y) Default Interest, if any.

(c) At any time during the period beginning on the date which is ninety one (91) calendar days from the Issue Date and ending on the date five (5) business days prior to the Maturity Date, the Borrower shall have the right, exercisable on not less than three (3) Trading Days prior written notice to the Holder of the Note to prepay the outstanding Note (principal and accrued interest), in full by making a payment to the Holder of an amount in cash equal to 120%, multiplied by the sum of: (w) the then outstanding principal amount of this Note plus (x) accrued and unpaid interest on the unpaid principal amount of this Note plus (y) Default Interest, if any.

(d) No consent of the Lead Investor shall be required upon a prepayment made from the proceeds of an Uplist transaction (as defined below). The parties acknowledge that the Note may also be converted by the Holder to Common Stock concurrent with the Uplist transaction.

1.10 Any notice of prepayment hereunder (an "Optional Prepayment Notice") shall be delivered to the Holder of the Note at its registered addresses by physical mail and shall state: (1) that the Borrower is exercising its right to prepay the Note, and (2) the date of prepayment which shall be not less than five (5) Trading Days and not more than ten (10) Trading Days from the date of the Optional Prepayment Notice; provided that no prepayment hereunder shall be made without the prior written consent of the Lead Investor. On the date fixed for prepayment (the "Optional Prepayment Date"), the Borrower shall make payment of the applicable prepayment amount to or upon the order of the Holder as specified by the Holder in writing to the Borrower. If the Borrower delivers an Optional Prepayment Notice and fails to pay the applicable prepayment amount due to the Holder of the Note within two (2) business days following the Optional Prepayment Date, the Borrower shall forever forfeit its right to prepay the Note pursuant to Section 1.9. Notwithstanding the foregoing, subject to the beneficial ownership limitations set forth in Section 1.1, nothing in this Section 1.10 or in Section 1.9 shall be deemed to limit the ability of the Holder to convert any portion of this Note or submit a Notice of Conversion prior to any Optional Prepayment Date.

ARTICLE II. CERTAIN COVENANTS

2.1 Distributions on Capital Stock. So long as the Borrower shall have any obligation under this Note, the Borrower shall not without the Holder's written consent (a) pay, declare or set apart for such payment, any dividend or other distribution (whether in cash, property or other securities) on shares of capital stock other than dividends on shares of Common Stock solely in the form of additional shares of Common Stock or (b) directly or indirectly or through any subsidiary make any other payment or distribution in respect of its capital stock except for distributions pursuant to any shareholders' rights plan which is approved by a majority of the Borrower's disinterested directors.

2.2 Restriction on Stock Repurchases. So long as the Borrower shall have any obligation under this Note, the Borrower shall not without the Holder's written consent redeem, repurchase or otherwise acquire (whether for cash or in exchange for property or other securities or otherwise) in any one transaction or series of related transactions any shares of capital stock of the Borrower or any warrants, rights or options to purchase or acquire any such shares.

2.3 Borrowings. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, create, incur, assume guarantee, endorse, contingently agree to purchase or otherwise become liable upon the obligation of any person, firm, partnership, joint venture or corporation, except by the endorsement of negotiable instruments for deposit or collection, or suffer to exist any liability for borrowed money, except (a) borrowings in existence or committed on the date hereof and of which the Borrower has informed Holder in writing prior to the date hereof, (b) indebtedness to trade creditors financial institutions or other lenders incurred in the ordinary course of business or (c) borrowings in respect of indebtedness which is fully subordinated to the obligations of the Company and its Subsidiaries under the Transaction Documents ("Permitted Indebtedness").

2.4 Sale of Assets. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, sell, lease or otherwise dispose of any significant portion of its assets outside the ordinary course of business. Any consent to the disposition of any assets shall be conditioned on a specified use of the proceeds towards the repayment of this Note.

2.5 Advances and Loans. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, lend money, give credit or make advances to any person, firm, joint venture or corporation, including, without limitation, officers, directors, employees, subsidiaries and affiliates of the Borrower, except loans, credits or advances (a) in existence or committed on the date hereof and which the Borrower has informed Holder in writing prior to the date hereof, (b) made in the ordinary course of business or (c) not in excess of $100,000.

2.6 Section 3(a)(10) Transaction. So long as this Note is outstanding, the Borrower shall not enter into any transaction or arrangement structured in accordance with, based upon, or related or pursuant to, in whole or in part, Section 3(a)(l0) of the Securities Act (a "3(a)(l0) Transaction"). In the event that the Borrower does enter into, or makes any issuance of Common Stock related to a 3(a)(l0) Transaction while this note is outstanding, a liquidated damages charge of 25% of the outstanding principal balance of this Note, but not less than Fifteen Thousand Dollars $15,000, will be assessed and will become immediately due and payable to the Holder at its election in the form of cash payment or addition to the balance of this Note.

2.7 Preservation of Existence, etc. The Borrower shall maintain and preserve, and cause each of its Subsidiaries to maintain and preserve, its existence, rights and privileges, and become or remain, and cause each of its Subsidiaries (other than dormant Subsidiaries that have no or minimum assets) to become or remain, duly qualified and in good standing in each jurisdiction in which the character of the properties owned or leased by it or in which the transaction of its business makes such qualification necessary.

2.8 Non-circumvention. The Borrower hereby covenants and agrees that the Borrower will not, by amendment of its Certificate or Articles of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Note, and will at all times in good faith carry out all the provisions of this Note and take all action as may be required to protect the rights of the Holder.

2.9 Repayment Upon Uplist. While any portion of this Note is outstanding, upon the listing of the Common Stock on any of the Nasdaq Global Market, Nasdaq Capital Market, New York Stock Exchange or NYSE American (the "Uplist"), upon Borrower's receipt of the cash proceeds of the offering conducted in conjunction with the Uplist, the Holder shall have the right in its sole discretion to require the Borrower to immediately apply all or any portion of such proceeds to repay all or any portion of the outstanding amounts owed under this Note within two (2) business days of receipt of Holder's demand for repayment. Failure of the Borrower to comply with this provision shall constitute an Event of Default. In the event that such proceeds are received by the Holder prior to the Maturity Date, the required prepayment shall be subject to the terms of Section 1.9 herein.

ARTICLE III. EVENTS OF DEFAULT

If any of the following events of default (each, an "Event of Default") shall occur:

3.1 Failure to Pay Principal or Interest. The Borrower fails to pay the principal hereof or interest thereon when due on this Note, whether at maturity, upon acceleration or otherwise.

3.2 Conversion and the Shares. The Borrower (i) fails to issue shares of Common Stock to the Holder (or announces or threatens in writing that it will not honor its obligation to do so) upon exercise by the Holder of the conversion rights of the Holder in accordance with the terms of this Note, (ii) fails to transfer or cause its transfer agent to transfer (issue) (electronically or in certificated form) any certificate for shares of Common Stock issued to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note, after receipt of a standard and customary opinion from Holder's or the Borrower's counsel (iii) directs its transfer agent not to transfer or delays, impairs, and/or hinders its transfer agent in transferring (or issuing) (electronically or in certificated form) any certificate for shares of Common Stock to be issued to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note, (iv) fails to remove (or directs its transfer agent not to remove or impairs, delays, and/or hinders its transfer agent from removing) any restrictive legend (or to withdraw any stop transfer instructions in respect thereof) on any certificate for any shares of Common Stock issued to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note (or makes any written announcement, statement or threat that it does not intend to honor the obligations described in this paragraph) and any such failure shall continue uncured (or any written announcement, statement or threat not to honor its obligations shall not be rescinded in writing) for three (3) business days after the Holder shall have delivered a Notice of Conversion, (v) fails to remain current in its obligations to its transfer agent, (vi) causes a conversion of this Note to be delayed, hindered or frustrated due to a balance owed by the Borrower to its transfer agent, (vii) fails to repay Holder, within forty eight (48) hours of a demand from the Holder, any amount of funds advanced by Holder to Borrower's transfer agent in order to process a conversion, (viii) fails to reserve sufficient amount of shares of common stock to satisfy the Reserved Amount at all times, (ix) causes its transfer agent to fail to accept an customary and standard Rule 144 opinion letter from counsel, covering the Holder's resale into the public market of the respective conversion shares under this Note, within two (2) business days of the Holder's submission of a Notice of Conversion to the Borrower (provided that the Holder must cause to be delivered an of counsel at the time that Holder submits the respective Notice of Conversion and the date of the respective Notice of Conversion must be on or after the date which is six (6) months after the date that the Holder funded the Purchase Price under this Note), and/or (x) an exemption under Rule 144 is unavailable for the Holder's deposit into Holder's brokerage account and resale into the public market of any of the conversion shares under this Note at any time after the date which is six (6) months after the date that the Holder funded the Purchase Price under this Note.

3.3 Reserved.

3.4 Breach of Covenants. The Borrower breaches any material covenant or other material term or condition contained in this Note, the Holder's First Note (as defined in the Purchase Agreement), or the Purchase Agreement and such breach continues for a period of the lesser of five (5) days after written notice thereof to the Borrower from the Holder, or ten (10) days from the date the Borrower was or should have been aware of such breach.

3.5 Breach of Representations and Warranties. Any representation or warranty of the Borrower made herein or in any agreement, statement or certificate given in writing pursuant hereto or in connection herewith (including, without limitation, the Purchase Agreement), shall be false or misleading in any material respect when made and the breach of which has (or with the passage of time will have) a material adverse effect on the rights of the Holder with respect to this Note or the Purchase Agreement.

3.6 Receiver or Trustee. The Borrower or any subsidiary of the Borrower shall make an assignment for the benefit of creditors or commence proceedings for its dissolution, or apply for or consent to the appointment of a receiver or trustee for it or for a substantial part of its property or business, or such a receiver or trustee shall otherwise be appointed for the Borrower or for a substantial part of its property or business without its consent and shall not be discharged within sixty (60) days after such appointment.

3.7 Judgments. Any money judgment, writ or similar process shall be entered or filed against the Borrower or any subsidiary of the Borrower or any of its property or other assets for more than $100,000, and shall remain unvacated, unbonded or unstayed for a period of twenty (20) days unless otherwise consented to by the Holder, which consent will not be unreasonably withheld.

3.8 Bankruptcy. Bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings, voluntary or involuntary, for relief under any bankruptcy law or any law for the relief of debtors shall be instituted by or against the Borrower or any subsidiary of the Borrower, or the Borrower admits in writing its inability to pay its debts generally as they mature, or have filed against it an involuntary petition for bankruptcy relief, all under federal or state laws as applicable or the Borrower admits in writing its inability to pay its debts generally as they mature, or have filed against it an involuntary petition for bankruptcy relief, all under international, federal or state laws as applicable.

3.9 Delisting of Common Stock. The Borrower shall fail to maintain the listing or quotation of the Common Stock on at least one of the OTC Pink, OTCQB, Nasdaq Global Market, Nasdaq Capital Market, New York Stock Exchange, NYSE American, or an equivalent replacement exchange and such failure to be listed or quoted on any such exchange continues for a period of the lesser of five (5) days after written notice thereof to the Borrower from the Holder, or ten (10) days from the date the Borrower was or should have been aware of such breach.

3.10 Failure to Comply with the Exchange Act. The Borrower shall fail to comply with the reporting requirements of the Exchange Act (including but not limited to becoming delinquent in its filings); and/or the Borrower shall cease to be subject to the reporting requirements of the Exchange Act and such failure continues for a period of the lesser of five (5) days after written notice thereof to the Borrower from the Holder, or ten (10) days from the date the Borrower was or should have been aware of such breach.

3.11 Liquidation. Any dissolution, liquidation, or winding up of Borrower or any substantial portion of its business.

3.12 Cessation of Operations. Any material cessation of operations by Borrower or Borrower admits it is otherwise generally unable to pay its debts as such debts become due, provided, however, that any disclosure of the Borrower's ability to continue as a "going concern" shall not be an admission that the Borrower cannot pay its debts as they become due.

3.13 Maintenance of Assets. The failure by Borrower to maintain any material intellectual property rights, personal, real property or other assets which are necessary to conduct its business (whether now or in the future), or any disposition or conveyance of any material asset of the Borrower and such failure continues for a period of the lesser of five (5) days after written notice thereof to the Borrower from the Holder, or ten (10) days from the date the Borrower was or should have been aware of such breach.

3.14 Financial Statement Restatement. The restatement of any financial statements filed by the Borrower with the SEC for any date or period from two years prior to the Issue Date of this Note and until this Note is no longer outstanding, if the result of such restatement would, by comparison to the unrestated financial statement, have constituted a material adverse effect on the rights of the Holder with respect to this Note or the Purchase Agreement.

3.15 Reverse Splits. Except for any reverse split conducted in anticipation of the Uplist, the Borrower effectuates a reverse split of its Common Stock without twenty (20) days prior written notice to the Holder.

3.16 Replacement of Transfer Agent. In the event that the Borrower replaces its transfer agent and fails to provide, prior to the effective date of such replacement, a fully executed Irrevocable Transfer Agent Instructions in a form as initially delivered pursuant to the Purchase Agreement (including but not limited to the provision to irrevocably reserve shares of Common Stock in the Reserved Amount) signed by the successor transfer agent to Borrower and the Borrower and such failure continues for a period of the lesser of five (5) days after written notice thereof to the Borrower from the Holder, or ten (10) days from the date the Borrower was or should have been aware of such breach.

3.17 Cessation of Trading. Any cessation of trading of the Common Stock on at least one of the OTC Pink, OTCQB, Nasdaq Global Market, Nasdaq Capital Market, New York Stock Exchange, NYSE American, or an equivalent replacement exchange, and such cessation of trading shall continue for a period of seven consecutive (7) Trading Days.

3.18 Cross-Default. Notwithstanding anything to the contrary contained in this Note or the other related or companion documents, a breach or default by the Borrower of any covenant or other term or condition contained in the Holder's First Note or any of the Other Agreements (as defined herein), after the passage of all applicable notice and cure or grace periods, shall, at the option of the Holder, be considered a default under this Note, the Holder's First Note, and the Other Agreements, in which event the Holder shall be entitled (but in no event required) to apply all rights and remedies of the Holder under the terms of this Note and the Other Agreements by reason of a default under said Other Agreement or hereunder. "Other Agreements" means, collectively, all agreements and instruments between, among or by: (1) the Borrower, and, or for the benefit of, (2) the Holder (and any affiliate of the Holder) or any other third party, including, without limitation, promissory notes; provided, however, the term "Other Agreements" shall not include the agreements and instruments defined as the Documents. Each of the loan transactions will be cross-defaulted with each other loan transaction and with all other existing and future debt of Borrower to the Holder.

3.19 OTC Markets Designation. OTC Markets changes the Borrower's designation to 'No Information' (Stop Sign), 'Caveat Emptor' (Skull and Crossbones), or 'OTC', 'Other OTC' or 'Grey Market' (Exclamation Mark Sign) and such change in designation continues for a period of the lesser of five (5) days after written notice thereof to the Borrower from the Holder, or ten (10) days from the date the Borrower was or should have been aware of such breach.

3.20 Bid Price. The Borrower shall lose the "bid" price for its Common Stock ($0.0001 on the "Ask" with zero market makers on the "Bid" per Level 2) and/or a market (including the OTC Pink, OTCQB or an equivalent replacement exchange) and such loss continues for a period of the lesser of five (5) days after written notice thereof to the Borrower from the Holder, or ten (10) days from the date the Borrower was or should have been aware of such breach.

3.21 Inside Information. Except in accordance with the Borrower's obligations, under the Amended and Restated Registration Rights Agreement, any attempt by the Borrower or its officers, directors, and/or affiliates to transmit, convey, disclose, or any actual transmittal, conveyance, or disclosure by the Borrower or its officers, directors, and/or affiliates of, material non-public information concerning the Borrower, to the Holder or its successors and assigns, which is not immediately cured by Borrower's filing of a Form 8-K pursuant to Regulation FD on that same date,.

3.22 Unavailability of Rule 144. If, at any time on or after the date which is six (6) months after the Issue Date, the Holder is unable to (i) obtain a standard "144 legal opinion letter" from an attorney reasonably acceptable to the Holder, the Holder's brokerage firm (and respective clearing firm), and the Borrower's transfer agent in order to facilitate the Holder's conversion of any portion of the Note into free trading shares of the Borrower's Common Stock pursuant to Rule 144, and (ii) thereupon deposit such shares into the Holder's brokerage account.

3.23 Uplist. The Company shall not have completed the Uplist by June 15, 2023.

3.24 Section 3(a)(10) Transaction. The Borrower shall enter into a 3(a)(l0) Transaction.

Upon the occurrence of any Event of Default (i) the Note shall become immediately due and payable and the Borrower shall pay to the Holder, in full satisfaction of its obligations hereunder, an amount equal to (A) 125% (the "Default Premium") times the sum of (w) the then outstanding principal amount of this Noteplus (x) accrued and unpaid interest on the unpaid principal amount of this Note to the date of payment (the "Mandatory Prepayment Date") plus (y) Default Interest, if any, on the amounts referred to in clauses (w) and/or (x) plus (z) any amounts owed to the Holder pursuant to Sections 1.3 and 1.4(g) hereof (the then outstanding principal amount of this Note to the date of payment plus the amounts referred to in clauses (x), (y) and (z) shall collectively be known as the "Default Amount") and (B) all other amounts payable hereunder, all without demand, presentment or notice, all of which hereby are expressly waived, together with all costs, including, without limitation, legal fees and expenses, of collection, and (ii) the Holder shall be entitled to exercise all other rights and remedies available at law or in equity. Notwithstanding the foregoing, upon any subsequent Event of Default following the first Event of Default hereunder that is not in any way related to nor caused by the first Event of Default, the Holder shall be entitled to add an additional 5% to the Default Premium for each such subsequent Event of Default. Additionally, if the registration statement required to be filed pursuant to the terms of the Amended and Restated Registration Rights Agreement has not been filed as of the occurrence of an Event of Default, the Borrower, shall be required to file such registration statement by the date that is the earlier of (i) the Filing Deadline (as defined in the Amended and Restated Registration Rights Agreement) and (ii) the date is 15 days following such Event of Default.

The Holder shall have the right at any time, to require the Borrower to immediately issue, in lieu of the Default Amount, the number of shares of Common Stock of the Borrower equal to the Default Amount divided by the Conversion Price then in effect, subject to the terms of this Note (including but not limited to any beneficial ownership limitations contained herein). This requirement by the Borrower shall automatically apply upon the occurrence of an Event of Default without the need for any party to give any notice or take any other action.

If the Holder shall commence an action or proceeding to enforce any provisions of this Note, including, without limitation, engaging an attorney, then if the Holder prevails in such action, the Holder shall be reimbursed by the Borrower for its reasonable attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

ARTICLE IV. MISCELLANEOUS

4.1 Failure or Indulgence Not Waiver. No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privileges. All rights and remedies existing hereunder are cumulative to, and not exclusive of, any rights or remedies otherwise available.

4.2 Notices. All notices, demands, requests, consents, approvals, and other communications required or permitted hereunder shall be in writing and, unless otherwise specified herein, shall be (i) personally served, (ii) deposited in the mail, registered or certified, return receipt requested, postage prepaid, (iii) delivered by reputable air courier service with charges prepaid, or (iv) transmitted by hand delivery, electronic mail, or facsimile, addressed as set forth below or to such other address as such party shall have specified most recently by written notice. Any notice or other communication required or permitted to be given hereunder shall be deemed effective (a) upon hand delivery or delivery by electronic mail or facsimile, with accurate confirmation generated by the transmitting facsimile machine, at the address or number designated below (if delivered on a business day during normal business hours where such notice is to be received), or the first business day following such delivery (if delivered other than on a business day during normal business hours where such notice is to be received) or (b) on the second business day following the date of mailing by express courier service, fully prepaid, addressed to such address, or upon actual receipt of such mailing, whichever shall first occur. The addresses for such communications shall be:

If to the Borrower, to:

Arch Therapeutics, Inc.
235 Walnut Street
Suite 6
Framingham, MA 01702
Attn:

If to the Holder:

Attn:

4.3 Amendments. Any modifications, amendments or waivers of the provisions hereof shall be subject to Section 7(e) of the Purchase Agreement. The term "Note" and all reference thereto, as used throughout this instrument, shall mean this instrument (and the other Notes issued pursuant to the Purchase Agreement) as originally executed, or if later amended or supplemented, then as so amended or supplemented.

4.4 Assignability. This Note shall be binding upon the Borrower and its successors and assigns, and shall inure to be the benefit of the Holder and its successors and assigns. Neither the Borrower nor the Holder shall assign this Note or any rights or obligations hereunder without the prior written consent of the other. Notwithstanding the foregoing, the Holder may assign its rights hereunder to any "accredited investor" (as defined in Rule 501(a) of the 1933 Act) in a private transaction from the Holder or to any of its "affiliates", as that term is defined under the 1934 Act, without the consent of the Borrower. Notwithstanding anything in this Note to the contrary, this Note may be pledged as collateral in connection with a bona fide margin account or other lending arrangement. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that following conversion of a portion of this Note, the unpaid and unconverted principal amount of this Note represented by this Note may be less than the amount stated on the face hereof.

4.5 Cost of Collection. If an Event of Default shall have occurred, the Borrower shall pay the Holder hereof reasonable costs of collection, including reasonable attorneys' fees.

4.6 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Note shall be governed by the internal laws of the State of Nevada, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Nevada or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Nevada.

4.7 Certain Amounts. Whenever pursuant to this Note the Borrower is required to pay an amount in excess of the outstanding principal amount (or the portion thereof required to be paid at that time) plus accrued and unpaid interest plus Default Interest on such interest, the Borrower and the Holder agree that the actual damages to the Holder from the receipt of cash payment on this Note may be difficult to determine and the amount to be so paid by the Borrower represents stipulated damages and not a penalty and is intended to compensate the Holder in part for loss of the opportunity to convert this Note and to earn a return from the sale of shares of Common Stock acquired upon conversion of this Note at a price in excess of the price paid for such shares pursuant to this Note. The Borrower and the Holder hereby agree that such amount of stipulated damages is not plainly disproportionate to the possible loss to the Holder from the receipt of a cash payment without the opportunity to convert this Note into shares of Common Stock.

4.8 Purchase Agreement. By its acceptance of this Note, each party agrees to be bound by the applicable terms of the Purchase Agreement.

4.9 Notice of Corporate Events. Except as otherwise provided below, the Holder of this Note shall have no rights as a Holder of Common Stock unless and only to the extent that it converts this Note into Common Stock. The Borrower shall provide the Holder with prior notification of any meeting of the Borrower's shareholders (and copies of proxy materials and other information sent to shareholders). In the event of any taking by the Borrower of a record of its shareholders for the purpose of determining shareholders who are entitled to receive payment of any dividend or other distribution, any right to subscribe for, purchase or otherwise acquire (including by way of merger, consolidation, reclassification or recapitalization) any share of any class or any other securities or property, or to receive any other right, or for the purpose of determining shareholders who are entitled to vote in connection with any proposed sale, lease or conveyance of all or substantially all of the assets of the Borrower or any proposed liquidation, dissolution or winding up of the Borrower, the Borrower shall mail a notice to the Holder, at least twenty (20) days prior to the record date specified therein (or thirty (30) days prior to the consummation of the transaction or event, whichever is earlier), of the date on which any such record is to be taken for the purpose of such dividend, distribution, right or other event, and a brief statement regarding the amount and character of such dividend, distribution, right or other event to the extent known at such time. The Borrower shall make a public announcement of any event requiring notification to the Holder hereunder substantially simultaneously with the notification to the Holder in accordance with the terms of this Section 4.9 including, but not limited to, name changes, recapitalizations, etc. as soon as possible under law.

4.10 Usury. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable provision shall automatically be revised to equal the maximum rate of interest or other amount deemed interest permitted under applicable law. The Borrower covenants (to the extent that it may lawfully do so) that it will not seek to claim or take advantage of any law that would prohibit or forgive the Borrower from paying all or a portion of the principal or interest on this Note.

4.11 Remedies. The Borrower acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder, by vitiating the intent and purpose of the transaction contemplated hereby. Accordingly, the Borrower acknowledges that the remedy at law for a breach of its obligations under this Note will be inadequate and agrees, in the event of a breach or threatened breach by the Borrower of the provisions of this Note, that the Holder shall be entitled, in addition to all other available remedies at law or in equity, and in addition to the penalties assessable herein, to an injunction or injunctions restraining, preventing or curing any breach of this Note and to enforce specifically the terms and provisions thereof, without the necessity of showing economic loss and without any bond or other security being required. No provision of this Note shall alter or impair the obligation of the Borrower, which is absolute and unconditional, to pay the principal of, and interest on, this Note at the time, place, and rate, and in the form, herein prescribed.

4.12 Severability. In the event that any provision of this Note is invalid or unenforceable under any applicable statute or rule of law, then such provision shall be deemed inoperative to the extent that it may conflict therewith and shall be deemed modified to conform with such statute or rule of law. Any provision hereof which may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provision hereof.

4.13 Dispute Resolution. In the case of a dispute as to the determination of the Conversion Price, Conversion Amount, any prepayment amount or Default Amount, Closing or Maturity Date, the closing bid price, or fair market value (as the case may be) or the arithmetic calculation of the Conversion Price or the applicable prepayment amount(s) (as the case may be), the Borrower or the Holder shall submit the disputed determinations or arithmetic calculations via electronic mail (i) within two (2) Business Days after receipt of the applicable notice giving rise to such dispute to the Borrower or the Holder or (ii) if no notice gave rise to such dispute, at any time after the Holder learned of the circumstances giving rise to such dispute. If the Holder and the Borrower are unable to agree upon such determination or calculation within two (2) Business Days of such disputed determination or arithmetic calculation (as the case may be) being submitted to the Borrower or the Holder, then the Borrower shall, within two (2) Business Days, submit via electronic mail (a) the disputed determination of the Conversion Price, the closing bid price, the or fair market value (as the case may be) to an independent, reputable investment bank selected by the Borrower and approved by the Lead Investor or (b) the disputed arithmetic calculation of the Conversion Price, Conversion Amount, any prepayment amount or Default Amount, to an independent, outside accountant selected by the Lead Investor. The Borrower shall cause the investment bank or the accountant to perform the determinations or calculations and notify the Borrower and the Holder of the results no later than ten (10) Business Days from the time it receives such disputed determinations or calculations. Such investment bank's or accountant's determination or calculation shall be binding upon all parties absent demonstrable error. The non-prevailing party shall be responsible for the payment investment bank or the account for their services pursuant to the provisions of this Section 4.13.

4.14 Terms of Future Financings. So long as this Note is outstanding, except for the offering conducted in connection with the Uplist, upon any issuance by the Borrower or any of its subsidiaries of any security with any term more favorable to the holder of such security or with a term in favor of the holder of such security that was not similarly provided to the Holder in this Note, then the Borrower shall notify the Holder of such additional or more favorable term and at Holder's option, the Borrower shall use its best efforts to cause such additional or more favorable term to become a part of the transaction documents with the Holder (irrespective of whether Borrower provided the notification or not). The types of terms contained in another security that may be more favorable to the holder of such security include, but are not limited to, terms addressing anti-dilution protections, conversion discounts, prepayment rate, conversion lookback periods, interest rates, original issue discounts, stock sale price, private placement price per share, and warrant coverage.

4.15 Future Raises. The Borrower shall not consummate any capital raising transactions (including but not limited to from the issuance of debt and/or equity securities) during the initial ninety (90) days after the Issue Date other than the Uplist without the consent of the Lead Investor.

[signature page follows]

IN WITNESS WHEREOF, Borrower has caused this Note to be signed in its name by its duly authorized officer as of the date first above written.

ARCH THERAPEUTICS, INC.

By: _____
Name:
Title:

Exhibit 10.2

EXHIBIT A

NOTICE OF CONVERSION

The undersigned hereby elects to convert $_____principal amount of the Note (defined below) together with $_____ of accrued and unpaid interest thereto, totaling $_____ into that number of shares of Common Stock to be issued pursuant to the conversion of the Note ("Common Stock") as set forth below, of Arch Therapeutics, Inc., a Nevada corporation (the "Borrower"), according to the conditions of the unsecured convertible note of the Borrower dated as of _____, 2023 (the "Note"), as of the date written below. No fee will be charged to the Holder for any conversion, except for transfer taxes, if any.

Box Checked as to applicable instructions:

[ ] The Borrower shall electronically transmit the Common Stock issuable pursuant to this Notice of Conversion to the account of the undersigned or its nominee with DTC through its Deposit Withdrawal At Custodian system ("DWAC Transfer").

Name of DTC Prime Broker:
Account Number:

[ ] The undersigned hereby requests that the Borrower issue a certificate or certificates for the number of shares of Common Stock set forth below (which numbers are based on the Holder's calculation attached hereto) in the name(s) specified immediately below or, if additional space is necessary, on an attachment hereto:

Name: [NAME]

Address: [ADDRESS]

Date of Conversion:	
Applicable Conversion Price:	$
Number of Shares of Common Stock to be Issued Pursuant to Conversion of the Notes:	
Amount of Principal Balance Due remaining Under the Note after this conversion:	
Accrued and unpaid interest remaining:	

By:_____
Name:
Title:
Date:

NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

COMMON STOCK PURCHASE WARRANT
ARCH THERAPEUTICS, INC.

Warrant Shares:_____ Initial Exercise Date:_____

THIS COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, _____or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the Initial Exercise Date and on or prior to 5:00 p.m. (New York City time) on_____(such applicable date, the "Termination Date") but not thereafter, to subscribe for and purchase from Arch Therapeutics, Inc., a Nevada corporation (the "Company"), up to_____[1]shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Securities Purchase Agreement (the "Purchase Agreement"), dated as of July 6, 2022, by and among the Company and the buyers signatory thereto, as amended on January 18, 2023 and again as of May 15, 2023.

[1] To be two hundred percent (200%) warrant coverage based on total amount of debt issued in third closing divided by $9.94.

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company of a duly executed facsimile copy or PDF copy submitted by e-mail (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the "Notice of Exercise"). Within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i)) following the date of exercise as aforesaid, the Holder shall deliver to the Company the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer or cashier's check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Business Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of Common Stock under this Warrant, subject to adjustment as provide herein, shall be $9.94.

c) Cashless Exercise. If at any time following the applicable Effectiveness Deadline (as defined in the Amended and Restated Registration Rights Agreement) ("Registration Deadline"), there is no effective registration statement registering, or no currently prospectus available for, the resale of the Warrant Shares by the Holder (a "Registration Default"), then this Warrant may also be exercised, in whole or in part, at such time by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

(A) = the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise;
(B) = the Exercise Price of this Warrant, as adjusted hereunder; and
(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the characteristics of the Warrants being exercised, and the holding period of the Warrant Shares being issued may be tacked on to the holding period of this Warrant. The Company agrees not to take any position contrary to this Section 2(c).

"VWAP" means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the "Pink Sheets" published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Purchasers of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

Notwithstanding anything herein to the contrary, on the Termination Date, this Warrant shall be automatically exercised via cashless exercise pursuant to this Section 2(c).

If at any time after the Registration Deadline, there is a Registration Default, then, for each full thirty (30) day period following the Registration Deadline, the amount of Warrant Shares of Holder shall be automatically increased by two percent (2%) over the Warrant Shares which are held by the Holder as on such dates, not to exceed in the aggregate an additional twenty-four percent (24%).

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's or its designee's balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144 (assuming cashless exercise of the Warrants), and otherwise by physical delivery of a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) three (3) Trading Days after the delivery to the Company of the Notice of Exercise, (ii) two (2) Trading Day after delivery of the aggregate Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise and aggregate Exercise Price (if not a cashless exercise) (such date, the "Warrant Share Delivery Date"). Upon delivery of the Notice of Exercise, the Holder shall be deemed for all corporate (but not Rule 144) purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each $1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), $10 per Trading Day (increasing to $20 per Trading Day on the third (3rd) Trading Day the Warrant Share Delivery Date) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the product of (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of $11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of $10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder $1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares. The Company shall pay all attorney fees required for the issuance of attorney legal opinions for removal of restrictive legends on Warrant Shares.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within one Trading Day confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Reserved.

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

e) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 3(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

f) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by facsimile or email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 15 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof and to the provisions of Section 4.1, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date on which the Holder delivers an assignment form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Exercise Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

d) Transfer Restrictions. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant, as the case may be, comply with the provisions of Section 2(f) of the Purchase Agreement.

e) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares. The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock one and a half (1.5) times the number of shares needed to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant (such that the aggregate amount so reserved for all Warrants combined is one and a half (1.5) times the amount needed for all such Warrants). The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be determined in accordance with the provisions of the Purchase Agreement.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered and the Holder does not utilize cashless exercise after six months from the date hereof, may have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant or the Purchase Agreement, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be delivered in accordance with the notice provisions of the Purchase Agreement.

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment; Waivers. Any modifications, amendments or waivers of the provisions hereof shall be subject to Section 7(e) of the Purchase Agreement.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

o) Equal Treatment of Holders. No consideration (including any modification of this Warrant) shall be offered or paid to any Person (as such term is defined in the Purchase Agreement) to amend or consent to a waiver or modification of any provision hereof unless the same consideration is also offered to all of the Holders. For clarification purposes, this provision constitutes a separate right granted to each Holder by the Company and negotiated separately by each Holder and is intended for the Company to treat the Holders as a class and shall not in any way be construed as the Holders acting in concert or as a group with respect to the Warrants or the shares of Common Stock issuable upon exercise of the Warrants.

p) Terms of Future Securities. So long as this Warrant is outstanding, except for the offering conducted in connection with the Uplist, upon any issuance by the Company or any of its subsidiaries of any security with any term more favorable to the holder of such security or with a term in favor of the holder of such security that was not similarly provided to the Holder in this Warrant, then the Company shall notify the Holder of such additional or more favorable term and at Holder's option, the Company shall use its best efforts to cause such additional or more favorable term to become a part of this Warrant with the Holder (irrespective of whether Company provided the notification or not). The types of terms contained in another security that may be more favorable to the holder of such security include, but are not limited to, terms addressing anti-dilution protections, stock sale price, private placement price per share, and warrant coverage.

****

(Signature Page Follows)

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

ARCH THERAPEUTICS, INC.
By:_____
Name:
Title: Chief Executive Officer

NOTICE OF EXERCISE

TO: [_____

(1) The undersigned hereby elects to purchase _____ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

[ ] in lawful money of the United States; or

[ ] if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

_____

The Warrant Shares shall be delivered to the following DWAC Account Number:

_____

_____

_____

(4) Accredited Investor. The undersigned is an "accredited investor" as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____
Signature of Authorized Signatory of Investing Entity: _____
Name of Authorized Signatory: _____
Title of Authorized Signatory: _____
Date: _____

EXHIBIT B

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____
(Please Print)

Phone Number: _____

Email Address: _____

Dated: _____ __, _____

Holder's Signature: _____

Holder's Address: _____

Exhibit 10.4

SECOND AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT

This Second Amended and Restated Registration Rights Agreement (this "**Agreement**") is made and entered into as of May 15, 2023, between Arch Therapeutics, Inc., a Nevada Corporation (the "**Company**"), and certain holders of the Company's Notes and Warrants identified on the signature pages hereto (collectively, the "**Consenting Stockholders**"). This Agreement amends and restates that certain Amended and Restated Registration Rights Agreement, dated as of January 18, 2023, as amended on April 15, 2023 (as amended, the "**A&R Registration Rights Agreement**"), by and among the Company and each purchaser identified on the signature pages thereto (each, including its successors and assigns, a "**Purchaser**" and collectively, the "**Purchasers**").

This Agreement is made pursuant to the Securities Purchase Agreement, dated as of July 6, 2022 between the Company and each Purchaser, as amended on January 18, 2023 and as subsequently amended on May 15, 2023 (as amended, the "**Purchase Agreement**").

WHEREAS, Section 2 of the A&R Registration Rights Agreement provides certain registration rights to the Purchasers;

WHEREAS, the Company and the Consenting Stockholders wish to amend the A&R Registration Rights Agreement in order to provide additional registration rights to the Consenting Stockholders in connection with an Additional Closing under the Purchase Agreement;

WHEREAS, Section 7(c) of the A&R Registration Rights Agreement provides that any provision of the A&R Registration Rights Agreement may be amended with the written consent of the Company and the Holders of 51% or more of the then outstanding Registrable Securities; and

WHEREAS, the Consenting Stockholders collectively constitute 51% or more of the outstanding Registerable Securities.

NOW, THEREFORE, in consideration of the premises, the mutual provisions of this Agreement, and other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

Section 1. Definitions. Capitalized terms used and not otherwise defined herein that are defined in the Purchase Agreement shall have the meanings given such terms in the Purchase Agreement. As used in this Agreement, the following terms shall have the following meanings:

"**Advice**" shall have the meaning set forth in Section 4(d).

"**Business Day**" means any day except Saturday, Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New of are authorized or required by law or other governmental action to close. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

"**Commission**" means the Securities and Exchange Commission.

"**Conversion Shares**" means the shares of Common Stock issuable upon conversion of the Notes.

"**Effectiveness Deadline**" means, (i) with respect to the Initial Registration Statement required to be filed hereunder, the 90th calendar day following July 6, 2022; (ii) with respect to the Second Closing Registration Statement required to be filed hereunder, the 195th calendar day following January 18, 2023; (iii) with respect to the Third Closing Registration Statement required to be filed hereunder, the 90th calendar day following the date hereof; and (iv) with respect to any additional Registration Statements which may be required pursuant to Section 2(c), the 60th calendar day following the date on which an additional Registration Statement is required to be filed hereunder; provided, however, that in the event the Company is notified by the Commission that one or more of the above Registration Statements will not be reviewed or is no longer subject to further review and comments, the Effectiveness Deadline as to such Registration Statement shall be the fifth Trading Day following the date on which the Company is so notified if such date precedes the dates otherwise required above, provided, further, if such Effectiveness Deadline falls on a day that is not a Trading Day, then the Effectiveness Deadline shall be the next succeeding Trading Day.

"**Effectiveness Period**" shall have the meaning set forth in Section 2(a)(iii).

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

"**Filing Deadline**" means: (i) with respect to the Initial Registration Statement, the date that is 45 days following the First Closing; (ii) with respect to the Second Closing Registration Statement, the earlier of (A) the date that is 45 days following the Uplist Transaction, and (B) the date that is 150 days following January 18, 2023; and; (iii) with respect to the Third Closing Registration Statement, the earlier of (A) the date that is 45 days following the Uplist Transaction, and (B) the date that is 90 days following the date of this Agreement; and (iv) with respect to any additional Registration Statements which may be required pursuant to Section 2(c), the earliest practical date on which the Company is permitted by SEC Guidance to file such additional Registration Statement related to the Registrable Securities.

"**First Closing Effectiveness Period**" shall have the meaning set forth in Section 2(a)(i).

"**First Closing Inducement Shares**" means shares of Common Stock issued at the First Closing in an amount equal to 15% of the principal amount of the First Notes divided by $9.94.

"**First Closing Registrable Securities**" means, as of any date of determination: (a) all of the Conversion Shares then issued and issuable upon conversion in full of the First Notes; (b) all of the Warrant Shares then issued and issuable upon exercise in full of the First Warrants; (c) all of the First Closing Inducement Shares and (d) any securities issued or then issuable upon any antidilution provisions, stock split, dividend or other distribution, recapitalization or similar event with respect to the foregoing; provided, however, that any such securities shall cease to be First Closing Registrable Securities (and the Company shall not be required to maintain the effectiveness of any, or file another, Registration Statement hereunder with respect thereto) for so long as: (i) a Registration Statement with respect to the sale of such First Closing Registrable Securities is declared effective by the Commission under the Securities Act and such First Closing Registrable Securities have been disposed of by the Holder in accordance with such effective Registration Statement, (ii) such First Closing Registrable Securities have been sold in accordance with Rule 144 and the Company has delivered certificates representing such securities that no longer bear a legend and/or for which the Transfer Agent has not instituted a stop order restricting further transfer, or (iii) such securities become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144 as set forth in a written opinion letter to such effect, addressed, delivered and acceptable to the Transfer Agent and the affected Holders (assuming that such securities and any securities issuable upon exercise or conversion of which, or as a dividend upon which, such securities were issued or are issuable, were at no time held by any Affiliate of the Company, as reasonably determined by the Company, upon the advice of counsel to the Company).

"**Holder**" or "**Holders**" means the holder or holders, as the case may be, from time to time of Registrable Securities.

"**Indemnified Party**" shall have the meaning set forth in Section 6(c).

"**Indemnifying Party**" shall have the meaning set forth in Section 6(c).

"**Inducement Shares**" shall mean the First Closing Inducement Shares, the Second Closing Inducement Shares, and Third Closing Inducement Shares.

"**Initial Registration Statement**" means the initial Registration Statement in connection with First Closing filed pursuant to Section 2(a)(i) of this Agreement.

"**Losses**" shall have the meaning set forth in Section 6(a).

"**Note(s)**" shall have the same meaning set forth in the Purchase Agreement.

"**Prospectus**" means the prospectus included in a Registration Statement (including, without limitation, a prospectus that includes any information previously omitted from a prospectus filed as part of an effective registration statement in reliance upon Rule 430A promulgated by the Commission pursuant to the Securities Act), as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by a Registration Statement, and all other amendments and supplements to the Prospectus, including post-effective amendments, and all material incorporated by reference or deemed to be incorporated by reference in such Prospectus.

"**Registrable Securities**" means, as of any date of determination: (a) all of the Conversion Shares then issued and issuable upon conversion in full of the Notes; (b) all of the Warrant Shares then issued and issuable upon exercise in full of the Warrants; (c) all of the Inducement Shares and (d) any securities issued or then issuable upon any antidilution provisions, stock split, dividend or other distribution, recapitalization or similar event with respect to the foregoing; provided, however, that any such securities shall cease to be Registrable Securities (and the Company shall not be required to maintain the effectiveness of any, or file another, Registration Statement hereunder with respect thereto) for so long as: (i) a Registration Statement with respect to the sale of such Registrable Securities is declared effective by the Commission under the Securities Act and such Registrable Securities have been disposed of by the Holder in accordance with such effective Registration Statement, (ii) such Registrable Securities have been sold in accordance with Rule 144 and the Company has delivered certificates representing such securities that no longer bear a legend and/or for which the Transfer Agent has not instituted a stop order restricting further transfer, or (iii) such securities become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144 as set forth in a written opinion letter to such effect, addressed, delivered and acceptable to the Transfer Agent and the affected Holders (assuming that such securities and any securities issuable upon exercise or conversion of which, or as a dividend upon which, such securities were issued or are issuable, were at no time held by any Affiliate of the Company, as reasonably determined by the Company, upon the advice of counsel to the Company).

"**Registration Statement**" means any registration statement required to be filed hereunder pursuant to Section 2(a) or Section 3 and any additional registration statements contemplated by Section 2(c), including (in each case) the Prospectus, amendments and supplements to any such registration statement or Prospectus, including pre-and post-effective amendments, all exhibits thereto, and all material incorporated by reference or deemed to be incorporated by reference in any such registration statement.

"**Rule 144**" means Rule 144 promulgated by the Commission under the 1933 Act, as such rule may be amended from time to time, or any other similar or successor rule or regulation of the Commission that may at any time permit the Holders to sell securities of the Company to the public without registration.

"**Rule 415**" means Rule 415 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission providing for offering securities on a continuous or delayed basis.

"**Rule 424**" means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

"**SEC Guidance**" means: (i) any publicly-available written or oral guidance of the Commission staff, or any comments, requirements or requests of the Commission staff; and (ii) the Securities Act.

"**Second Closing Effectiveness Period**" shall have the meaning set forth in Section 2(a)(ii).

"**Second Closing Inducement Shares**" means shares of Common Stock issued at the Second Closing in an amount equal to 15% of the principal amount of the Second Notes divided by $9.94.

"**Second Closing Registrable Securities**" means, as of any date of determination: (a) all of the Conversion Shares then issued and issuable upon conversion in full of the Second Notes; (b) all of the Warrant Shares then issued and issuable upon exercise in full of the Second Warrants; (c) all of the Second Closing Inducement Shares and (d) any securities issued or then issuable upon any antidilution provisions, stock split, dividend or other distribution, recapitalization or similar event with respect to the foregoing; provided, however, that any such securities shall cease to be Second Closing Registrable Securities (and the Company shall not be required to maintain the effectiveness of any, or file another, Registration Statement hereunder with respect thereto) for so long as: (i) a Registration Statement with respect to the sale of such Second Closing Registrable Securities is declared effective by the Commission under the Securities Act and such Second Closing Registrable Securities have been disposed of by the Holder in accordance with such effective Registration Statement, (ii) such Second Closing Registrable Securities have been sold in accordance with Rule 144 and the Company has delivered certificates representing such securities that no longer bear a legend and/or for which the Transfer Agent has not instituted a stop order restricting further transfer, or (iii) such securities become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144 as set forth in a written opinion letter to such effect, addressed, delivered and acceptable to the Transfer Agent and the affected Holders (assuming that such securities and any securities issuable upon exercise or conversion of which, or as a dividend upon which, such securities were issued or are issuable, were at no time held by any Affiliate of the Company, as reasonably determined by the Company, upon the advice of counsel to the Company).

"**Securities Act**" means the Securities Act of 1933, as amended.

"**Selling Stockholder Questionnaire**" shall have the meaning set forth in Section 4(a).

"**Third Closing Effectiveness Period**" shall have the meaning set forth in Section 2(a)(iii).

"**Third Closing Inducement Shares**" means shares of Common Stock issued at the Third Closing in an amount equal to 15% of the principal amount of the Third Notes divided by $9.94.

"**Third Closing Registrable Securities**" means, as of any date of determination: (a) all of the Conversion Shares then issued and issuable upon conversion in full of the Third Notes; (b) all of the Warrant Shares then issued and issuable upon exercise in full of the Third Warrants; (c) all of the Third Closing Inducement Shares and (d) any securities issued or then issuable upon any antidilution provisions, stock split, dividend or other distribution, recapitalization or similar event with respect to the foregoing; provided, however, that any such securities shall cease to be Third Closing Registrable Securities (and the Company shall not be required to maintain the effectiveness of any, or file another, Registration Statement hereunder with respect thereto) for so long as: (i) a Registration Statement with respect to the sale of such Third Closing Registrable Securities is declared effective by the Commission under the Securities Act and such Third Closing Registrable Securities have been disposed of by the Holder in accordance with such effective Registration Statement, (ii) such Third Closing Registrable Securities have been sold in accordance with Rule 144 and the Company has delivered certificates representing such securities that no longer bear a legend and/or for which the Transfer Agent has not instituted a stop order restricting further transfer, or (iii) such securities become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144 as set forth in a written opinion letter to such effect, addressed, delivered and acceptable to the Transfer Agent and the affected Holders (assuming that such securities and any securities issuable upon exercise or conversion of which, or as a dividend upon which, such securities were issued or are issuable, were at no time held by any Affiliate of the Company, as reasonably determined by the Company, upon the advice of counsel to the Company).

"**Trading Day**" means a day on which the principal national securities exchanges on which the Registrable Securities is listed or admitted to trading, are open for the transaction of business or, if the Registrable Securities are not listed or admitted to trading on any national securities exchange, a Business Day.

"**Uplist Transaction**" means the listing of the Common Stock on any of the Nasdaq Capital Market, Nasdaq Global Market, New York Stock Exchange or NYSE American.

"Warrant(s)" shall have the same meaning set forth in the Purchase Agreement.

"**Warrant Shares**" means the shares of Common Stock issuable upon exercise of the Warrants.

Section 2. Required Registration.

(a)(i) The Company shall prepare and, as soon as practicable, but in no event later than the applicable Filing Deadline, file with the Commission a Registration Statement covering the resale of all of the First Closing Registrable Securities (the "**Initial Registration Statement**"); provided that the Initial Registration Statement shall register for resale at least the number of shares of Common Stock equal to 100% of the sum of the maximum number of shares of Common Stock issuable upon conversion of the First Notes or exercise of the First Warrants at the initial conversion price thereof (the "**Initial Required Registration Amount**"); provided that should any event following the date hereof result in the maximum number of shares of Common Stock issuable upon conversion of the First Notes or exercise of the First Warrants being increased because of the application of any provisions thereof, the Company shall promptly file an amendment to the Initial Registration Statement providing for registration of such additional shares. The Registration Statement filed hereunder shall be on Form S-1 in connection with the First Closing. Subject to the terms of this Agreement, the Company shall cause each Registration Statement required to be filed under this Agreement to be declared effective under the Securities Act as promptly as possible after the filing thereof, but in any event no later than the applicable Effectiveness Deadline, and shall keep such Registration Statements continuously effective under the Securities Act until the earlier of: (i) the date that all Registrable Securities covered by such Registration Statement no longer constitute Registrable Securities, or (ii) the two year anniversary of July 6, 2022 (the "**First Closing Effectiveness Period**"). The Company shall telephonically request effectiveness of a Registration Statement as of 5:00 p.m. Eastern Time on a Trading Day. The Company shall promptly notify the Holders via facsimile or by e-mail of the effectiveness of a Registration Statement on the same Trading Day that the Company telephonically confirms effectiveness with the Commission, which shall be the date requested for effectiveness of such Registration Statement. The Company shall, by 9:30 a.m. Eastern Time on the Trading Day after the effective date of such Registration Statement, file a final Prospectus with the Commission as required by Rule 424.

(ii) The Company shall prepare and, as soon as practicable, but in no event later than the applicable Filing Deadline, file with the Commission a Registration Statement covering the resale of all of the Second Closing Registrable Securities (the "**Second Registration Statement**"); provided that the Second Registration Statement shall register for resale at least the number of shares of Common Stock equal to 100% of the sum of the maximum number of shares of Common Stock issuable upon conversion of the Second Notes or exercise of the Second Warrants at the initial conversion price thereof (the "**Second Required Registration Amount**"); provided that should any event following the date hereof result in the maximum number of shares of Common Stock issuable upon conversion of the Second Notes or exercise of the Second Warrants being increased because of the application of any provisions thereof, the Company shall promptly file an amendment to the Second Registration Statement providing for registration of such additional shares. The Second Registration Statement filed hereunder shall be on Form S-1 in connection with the Second Closing. Subject to the terms of this Agreement, the Company shall cause each Registration Statement required to be filed under this Agreement to be declared effective under the Securities Act as promptly as possible after the filing thereof, but in any event no later than the applicable Effectiveness Deadline, and shall keep such Registration Statements continuously effective under the Securities Act until the earlier of: (i) the date that all Second Closing Registrable Securities covered by such Registration Statement no longer constitute Second Closing Registrable Securities, or (ii) the two year anniversary of January 18, 2023 (the "**Second Closing Effectiveness**"). The Company shall telephonically request effectiveness of a Registration Statement as of 5:00 p.m. Eastern Time on a Trading Day. The Company shall promptly notify the Holders via facsimile or by e-mail of the effectiveness of a Registration Statement on the same Trading Day that the Company telephonically confirms effectiveness with the Commission, which shall be the date requested for effectiveness of such Registration Statement. The Company shall, by 9:30 a.m. Eastern Time on the Trading Day after the effective date of such Registration Statement, file a final Prospectus with the Commission as required by Rule 424.

(iii) The Company shall prepare and, as soon as practicable, but in no event later than the applicable Filing Deadline, file with the Commission a Registration Statement covering the resale of all of the Third Closing Registrable Securities (the "**Third Registration Statement**"); provided that the Third Registration Statement shall register for resale at least the number of shares of Common Stock equal to 100% of the sum of the maximum number of shares of Common Stock issuable upon conversion of the Third Notes or exercise of the Third Warrants at the initial conversion price thereof (the "**Third Required Registration Amount**"); provided that should any event following the date hereof result in the maximum number of shares of Common Stock issuable upon conversion of the Third Notes or exercise of the Third Warrants being increased because of the application of any provisions thereof, the Company shall promptly file an amendment to the Third Registration Statement providing for registration of such additional shares. The Third Registration Statement filed hereunder shall be on Form S-1 in connection with the Third Closing. Subject to the terms of this Agreement, the Company shall cause each Registration Statement required to be filed under this Agreement to be declared effective under the Securities Act as promptly as possible after the filing thereof, but in any event no later than the applicable Effectiveness Deadline, and shall keep such Registration Statements continuously effective under the Securities Act until the earlier of: (i) the date that all Third Closing Registrable Securities covered by such Registration Statement no longer constitute Third Closing Registrable Securities, or (ii) the two year anniversary of the date of this Agreement (the "**Third Closing Effectiveness Period**" and, together with the First Closing Effective Period and Second Closing Effective Period, the "**Effectiveness Period**"). The Company shall telephonically request effectiveness of a Registration Statement as of 5:00 p.m. Eastern Time on a Trading Day. The Company shall promptly notify the Holders via facsimile or by e-mail of the effectiveness of a Registration Statement on the same Trading Day that the Company telephonically confirms effectiveness with the Commission, which shall be the date requested for effectiveness of such Registration Statement. The Company shall, by 9:30 a.m. Eastern Time on the Trading Day after the effective date of such Registration Statement, file a final Prospectus with the Commission as required by Rule 424.

(b) Notwithstanding the registration obligations set forth in Section 2(a), if the Commission informs the Company that all of the Registrable Securities cannot, as a result of the application of Rule 415, be registered for resale as a secondary offering on a single registration statement, the Company agrees to promptly inform each of the Holders thereof and use its reasonable best efforts to file amendments to the applicable Registration Statement as required by the Commission, covering the maximum number of Registrable Securities permitted to be registered by the Commission, on such form available to register for resale the Registrable Securities as a secondary offering, subject to the provisions of this Section 2; with respect to filing on such appropriate form; provided, however, that prior to filing such amendment, the Company shall be obligated to use diligent efforts to advocate with the Commission for the registration of all of the Registrable Securities in accordance with the SEC Guidance, including without limitation, Compliance and Disclosure Interpretation 612.09 of the Commission.

(c) Notwithstanding any other provision of this Agreement, if the Commission or any SEC Guidance sets forth a limitation on the number of Registrable Securities permitted to be registered on a particular Registration Statement as a secondary offering (and notwithstanding that the Company used diligent efforts to advocate with the Commission for the registration of all or a greater portion of Registrable Securities), unless otherwise: (i) directed in writing by a Holder as to its Registrable Securities, or (ii) directed by the Commission as to the limitations or restrictions that it would require, the number of Registrable Securities to be registered on such Registration Statement will be reduced as follows:

a. First, the Company shall reduce or eliminate any securities to be included by any Person other than a Holder;

b. Second, the Company shall reduce or eliminate Registrable Securities contemplated by clause (d) of the definition of Registrable Securities (applied, in the case that only some such Registrable Securities may be registered, to the Holders on a pro rata basis based on the total number of such unregistered Registrable Securities held by such Holders);

c. Third, the Company shall reduce or eliminate Registrable Securities represented by Warrant Shares (applied, in the case that some Warrant Shares may be registered, to the Holders on a pro-rata basis based on the total number of unregistered Warrant Shares held by such Holders)

d. Fourth, the Company shall reduce Registrable Securities represented by Inducement Shares (applied, in the case that some Inducement Shares may be registered, to the Holders on a pro-rata basis based on the total number of unregistered Inducement Shares held by such Holders); and

e. Fifth, the Company shall reduce Registrable Securities represented by Conversion Shares (applied, in the case that some Conversion Shares may be registered, to the Holders on a pro-rata basis based on the total number of unregistered Conversion Shares held by such Holders); and

In the event of a cutback hereunder, the Company shall give the Holder at least five (5) Trading Days prior written notice along with the calculations as to such Holder's allotment. In the event the Company amends a Registration Statement in accordance with the foregoing, or determines to file an additional Registration Statement, the Company will use its reasonable best efforts to file with the Commission, as promptly as allowed by Commission or SEC Guidance provided to the Company or to registrants of securities in general, one or more Registration Statements on such other form available to register for resale those Registrable Securities that were not registered for resale on the Registration Statement, as amended, as a result of any cutback of Registrable Securities of the Holders or any Registrable Securities not included in the Registration Statement. In any additional Registration Statement filed because of a cutback in the number of Registrable Securities included in the Registration Statement, all holders of shares of Common Stock included in such additional Registration Statement shall be subject to any additional cutbacks that may be required by the Commission on a *pro rata* basis.

Section 3. Company Obligations. In connection with the Company's registration obligations hereunder, the Company shall:

(a) Not less than five (5) Trading Days prior to the filing of each Registration Statement and not less than two (2) Trading Days prior to the filing of any related Prospectus or any amendment or supplement thereto and shall use its commercially reasonable efforts to include any document that would be incorporated or deemed to be incorporated therein by reference, the Company shall: (i) furnish to each Holder copies of all such documents proposed to be filed, which documents (other than those incorporated or deemed to be incorporated by reference) will be subject to the review of such Holders, and (ii) cause its officers and directors, counsel and independent registered public accountants to respond to such inquiries as shall be necessary, in the reasonable opinion of respective counsel to each Holder, to conduct a reasonable investigation within the meaning of the Securities Act. Notwithstanding the above, the Company shall not be obligated to provide the Holders advance copies of any universal shelf registration statement registering securities in addition to those required hereunder, or any Prospectus prepared thereto.

(b) (i) Prepare and file with the Commission such amendments, including post-effective amendments, to a Registration Statement and the Prospectus used in connection therewith as may be necessary to keep a Registration Statement continuously effective as to the applicable Registrable Securities for the applicable Effectiveness Period and prepare and file with the Commission such additional Registration Statements in order to register for resale under the Securities Act all of the Registrable Securities, (ii) cause the related Prospectus to be amended or supplemented by any required Prospectus supplement (subject to the terms of this Agreement), and, as so supplemented or amended, to be filed pursuant to Rule 424, (iii) respond as promptly as reasonably possible to any comments received from the Commission with respect to a Registration Statement or any amendment thereto, and (iv) comply in all material respects with the applicable provisions of the Securities Act and the Exchange Act with respect to the disposition of all Registrable Securities covered by a Registration Statement during the applicable period in accordance (subject to the terms of this Agreement) with the intended methods of disposition by the Holders thereof set forth in such Registration Statement as so amended or in such Prospectus as so supplemented.

(c) If during the applicable Effectiveness Period, the number of Registrable Securities at any time exceeds 105% of the number of shares of Common Stock then registered in a Registration Statement, then the Company shall file as soon as reasonably practicable, but in any case, prior to the applicable Filing Deadline, an additional Registration Statement covering the resale by the Holders of not less than the number of such Registrable Securities.

(d) Notify the Holders of Registrable Securities to be sold (which notice shall, pursuant to clauses (iii) through (vi) hereof, be accompanied by an instruction to suspend the use of the Prospectus until the requisite changes have been made) as promptly as reasonably possible: (i) (A) when a Prospectus or any Prospectus supplement or post-effective amendment to a Registration Statement has been filed; (B) when the Commission notifies the Company whether there will be a "review" of such Registration Statement; and (C) with respect to a Registration Statement or any post-effective amendment, when the same has become effective, (ii) of any request by the Commission or any other federal or state governmental authority for amendments or supplements to a Registration Statement or Prospectus or for additional information, in each case, after the such Registration Statement has been declared effective, (iii) of the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of a Registration Statement covering any or all of the Registrable Securities or the initiation of any Proceedings for that purpose, (iv) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction, or the initiation or threatening of any Proceeding for such purpose, (v) of the occurrence of any event or passage of time that makes the financial statements included in a Registration Statement ineligible for inclusion therein or any statement made in a Registration Statement or Prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires any revisions to a Registration Statement, Prospectus or other documents so that, in the case of a Registration Statement or the Prospectus, as the case may be, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (vi) of the occurrence or existence of any pending corporate development with respect to the Company that the Company believes may be material and that, in the determination of the Company, makes it not in the best interest of the Company to allow continued availability of a Registration Statement or Prospectus, provided, however, in no event shall any such notice contain any information which would constitute material, non-public information regarding the Company or any of its Subsidiaries.

(e) Use its reasonable best efforts to avoid the issuance of, or, if issued, obtain the withdrawal of (i) any order stopping or suspending the effectiveness of a Registration Statement, or (ii) any suspension of the qualification (or exemption from qualification) of any of the Registrable Securities for sale in any jurisdiction, at the earliest practicable moment.

(f) Furnish to each Holder, without charge, at least one conformed copy of each such Registration Statement and each amendment thereto, including financial statements and schedules, all documents incorporated or deemed to be incorporated therein by reference to the extent requested by such Person, and all exhibits to the extent requested by such Person (including those previously furnished or incorporated by reference) promptly after the filing of such documents with the Commission; provided, that any such item which is available on the EDGAR system (or successor thereto) need not be furnished. Subject to the terms of this Agreement, the Company hereby consents to the use of such Prospectus and each amendment or supplement thereto by each of the selling Holders in connection with the offering and sale of the Registrable Securities covered by such Prospectus and any amendment or supplement thereto, except after the Company has given notice pursuant to Section 3(d).

(g) The Company shall cooperate with any broker-dealer through which a Holder proposes to resell its Registrable Securities in effecting a filing with the FINRA Corporate Financing Department pursuant to FINRA Rule 5110, as requested by any such Holder.

(h) Prior to any resale of Registrable Securities by a Holder, use its reasonable best efforts to register or qualify or cooperate with the selling Holders in connection with the registration or qualification (or exemption from the Registration or qualification) of such Registrable Securities for the resale by the Holder under the securities or Blue Sky laws of such jurisdictions within the United States as any Holder reasonably requests in writing, to keep each registration or qualification (or exemption therefrom) effective during the applicable Effectiveness Period and to do any and all other acts or things reasonably necessary to enable the disposition in such jurisdictions of the Registrable Securities covered by each Registration Statement; provided, that, the Company shall not be required to qualify generally to do business in any jurisdiction where it is not then so qualified, subject the Company to any material tax in any such jurisdiction where it is not then so subject or file a general consent to service of process in any such jurisdiction.

(i) If requested by a Holder, cooperate with such Holder to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be delivered to a transferee pursuant to a Registration Statement, which certificates shall be free, to the extent permitted by the Purchase Agreement, of all restrictive legends, and to enable such Registrable Securities to be in such denominations and registered in such names as any such Holder may request.

(j) Upon the occurrence of any event contemplated by clause (v) or (vi) of Section 3(d), as promptly as reasonably possible under the circumstances taking into account the Company's good faith assessment of any adverse consequences to the Company and its stockholders of the premature disclosure of such event, prepare a supplement or amendment, including a post-effective amendment, to a Registration Statement or a supplement to the related Prospectus or any document incorporated or deemed to be incorporated therein by reference, and file any other required document so that, as thereafter delivered, neither a Registration Statement nor such Prospectus will contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading. If the Company notifies the Holders in accordance with clauses (iii) through (vi) of Section 3(d) above to suspend the use of any Prospectus until the requisite changes to such Prospectus have been made, then the Holders shall suspend use of such Prospectus. The Company will use its reasonable best efforts to ensure that the use of the Prospectus may be resumed as promptly as is practicable.

(k) Comply with all applicable rules and regulations of the Commission.

(l) The Company may require each selling Holder to furnish to the Company a certified statement as to the number of shares of Common Stock beneficially owned by such Holder and, if required by the Commission, the natural persons thereof that have voting and dispositive control over the shares. During any periods that the Company is unable to meet its obligations hereunder with respect to the registration of the Registrable Securities solely because any Holder fails to furnish such information within three Trading Days of the Company's request, any liquidated damages that are accruing at such time shall be tolled and any Event that may otherwise occur solely because of such delay shall be suspended until such information is delivered to the Company.

Section 4. Obligations of the Holders.

(a) Each Holder agrees to furnish to the Company a completed questionnaire in the form attached to this Agreement as **Appendix A** (a "**Selling Stockholder Questionnaire**") on a date that is not less than ten (10) days prior to the applicable Filing Deadline or by the end of the fourth (4th) Trading Day following the date on which such Holder receives draft materials in accordance with Section 2(a). Each Holder shall furnish in writing to the Company such additional information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it, and shall execute such documents in connection with such registration, as shall be reasonably required to effect the registration of such Registrable Securities. A Holder shall provide such information to the Company at least two (2) Business Days prior to the first anticipated filing date of such Registration Statement if such Holder elects to have any of the Registrable Securities included in the Registration Statement. The Company shall not be required to include the Registrable Securities of a Holder in a Registration Statement, and no Event shall be deemed to occur and or continue solely as a result of the failure to include the Registrable Securities of such Holder in the Registration Statement, if such Holder fails to furnish to the Company a fully completed Selling Stockholder Questionnaire at least two (2) Business Days prior to the applicable Filing Deadline.

(b) Each Holder agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of a Registration Statement hereunder, unless such Holder has notified the Company in writing of its election to exclude all of its Registrable Securities from such Registration Statement.

(c) Each Holder covenants and agrees that it will comply with the prospectus delivery requirements of the Securities Act as applicable to it (unless an exemption therefrom is available) in connection with sales of Registrable Securities pursuant to a Registration Statement.

(d) Each Holder agrees that, upon receipt of any notice from the Company of either: (i) the commencement of an Allowed Delay, or (ii) the happening of an event pursuant to Section 3(d)(iii) – (vi) hereof, such Holder will immediately discontinue disposition of Registrable Securities pursuant to the Registration Statement covering such Registrable Securities, until it is advised in writing (the "**Advice**") by the Company that the use of the applicable Prospectus (as it may have been supplemented or amended) may be resumed. The Company will use its reasonable best efforts to ensure that the use of the Prospectus may be resumed as promptly as is practicable.

Section 5. Registration Expenses. All fees and expenses incident to the performance of or compliance with, this Agreement by the Company shall be borne by the Company whether or not any Registrable Securities are sold pursuant to a Registration Statement. The fees and expenses referred to in the foregoing sentence shall include, without limitation, (i) all registration and filing fees (including, without limitation, fees and expenses of the Company's counsel and independent registered public accountants) (A) with respect to filings made with the Commission, (B) with respect to filings required to be made with any Trading Market on which the Common Stock is then listed for trading, and (C) in compliance with applicable state securities or Blue Sky laws reasonably agreed to by the Company in writing (including, without limitation, fees and disbursements of counsel for the Company in connection with Blue Sky qualifications or exemptions of the Registrable Securities), (ii) printing expenses (including, without limitation, expenses of printing certificates for Registrable Securities), (iii) messenger, telephone and delivery expenses of the Company, (iv) fees and disbursements of counsel for the Company, (v) Securities Act liability insurance, if the Company so desires such insurance, and (vi) fees and expenses of all other Persons retained by the Company in connection with the consummation of the transactions contemplated by this Agreement. In addition, the Company shall be responsible for all of its internal expenses incurred in connection with the consummation of the transactions contemplated by this Agreement (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties), the expense of any annual audit and the fees and expenses incurred in connection with the listing of the Registrable Securities on any securities exchange as required hereunder. In no event shall the Company be responsible for any broker or similar commissions of any Holder or, except to the extent provided for in the Transaction Documents, any legal fees or other costs of the Holders.

Section 6. Indemnification.

(a) Indemnification by the Company. The Company shall, notwithstanding any termination of this Agreement, indemnify and hold harmless each Holder, the officers, directors, members, partners, agents, brokers (including brokers who offer and sell Registrable Securities as principal as a result of a pledge or any failure to perform under a margin call of Common Stock), investment advisors and employees of the Company, each Person who controls any such Holder (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) and the officers, directors, members, stockholders, partners, agents, investment advisors and employees of each such controlling Person, to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, reasonable attorneys' fees) and expenses (collectively, "**Losses**"), as incurred, arising out of or relating to: (i) any untrue or alleged untrue statement of a material fact contained in a Registration Statement, any Prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading, or (ii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act or any state securities law, or any rule or regulation thereunder, in connection with the performance of its obligations under this Agreement, except to the extent, but only to the extent, that (A) such untrue statements or omissions are based solely upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use therein (it being understood that such information shall only consist of the name of the Holder, the number of offered shares (excluding percentages), the address and other information with respect to the Holder and the information included on **Appendix A** hereto, each only to the extent which such information appears in an effective Registration Statement or any Prospectus), or (B) in the case of an occurrence of an event of the type specified in Section 3(d)(iii)-(vi), the use by such Holder of an outdated, defective or otherwise unavailable Prospectus after the Company has notified such Holder in writing that the Prospectus is outdated, defective or otherwise unavailable for use by such Holder and prior to the receipt by such Holder of the Advice contemplated in Section 4(d). The Company shall notify the Holders promptly of the institution, threat or assertion of any Proceeding arising from or in connection with the transactions contemplated by this Agreement of which the Company is aware. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such indemnified person and shall survive the transfer of any Registrable Securities by any of the Holders in accordance with Section 7(e).

(b) Indemnification by Holders. Each Holder shall, severally and not jointly, indemnify and hold harmless the Company, its directors, officers, agents and employees, each Person who controls the Company (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, agents or employees of such controlling Persons, to the fullest extent permitted by applicable law, from and against all Losses, as incurred, to the extent arising out of or based solely upon: (i) such Holder's failure to comply with any applicable prospectus delivery requirements of the Securities Act through no fault of the Company, or (ii) any untrue or alleged untrue statement of a material fact contained in any Registration Statement, any Prospectus, or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading to the extent, but only to the extent, that such untrue statement or omission is contained in any information so furnished in writing by such Holder to the Company expressly for inclusion in such Registration Statement or such Prospectus (it being understood that such information shall only consist of the name of the Holder, the number of offered shares (excluding percentages), the address and other information with respect to the Holder and the information included on **Appendix A** hereto, each only to the extent which such information appears in an effective Registration Statement or any Prospectus), such Prospectus or in any amendment or supplement thereto or (iii) in the case of an occurrence of an event of the type specified in Section 3(d)(iii)-(vi), to the extent, but only to the extent, related to the use by such Holder of an outdated, defective or otherwise unavailable Prospectus after the Company has notified such Holder in writing that the Prospectus is outdated, defective or otherwise unavailable for use by such Holder and prior to the receipt by such Holder of the Advice contemplated in Section 4(d). In no event shall the liability of any selling Holder under this Section 6(b) be greater in amount than the dollar amount of the net proceeds received by such Holder upon the sale of the Registrable Securities giving rise to such indemnification obligation, except in the case of fraud or willful misconduct by such Holder.

(c) Conduct of Indemnification Proceedings. If any Proceeding shall be brought or asserted against any Person entitled to indemnity hereunder (an "**Indemnified Party**"), such Indemnified Party shall promptly notify the Person from whom indemnity is sought (the "**Indemnifying Party**") in writing, and the Indemnifying Party shall have the right to assume the defense thereof, including the employment of counsel reasonably satisfactory to the Indemnified Party and the payment of all reasonable fees and expenses incurred in connection with defense thereof; provided, that, the failure of any Indemnified Party to give such notice shall not relieve the Indemnifying Party of its obligations or liabilities pursuant to this Agreement, except (and only) to the extent that it shall be finally determined by a court of competent jurisdiction (which determination is not subject to appeal or further review) that such failure shall have materially and adversely prejudiced the Indemnifying Party. An Indemnified Party shall have the right to employ separate counsel in any such Proceeding and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party or Parties unless: (1) the Indemnifying Party has agreed in writing to pay such fees and expenses, (2) the Indemnifying Party shall have failed promptly to assume the defense of such Proceeding and to employ counsel reasonably satisfactory to such Indemnified Party in any such Proceeding, or (3) the named parties to any such Proceeding (including any impleaded parties) include both such Indemnified Party and the Indemnifying Party, and counsel to the Indemnified Party shall reasonably believe that a material conflict of interest is likely to exist if the same counsel were to represent such Indemnified Party and the Indemnifying Party (in which case, if such Indemnified Party notifies the Indemnifying Party in writing that it elects to employ separate counsel at the expense of the Indemnifying Party, the Indemnifying Party shall not have the right to assume the defense thereof and the reasonable fees and expenses of no more than one separate counsel shall be at the expense of the Indemnifying Party). The Indemnifying Party shall not be liable for any settlement of any such Proceeding effected without its written consent. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, effect any settlement of any pending Proceeding in respect of which any Indemnified Party is a party, unless such settlement includes an unconditional release of such Indemnified Party from all liability on claims that are the subject matter of such Proceeding. Subject to the terms of this Agreement, all reasonable fees and expenses of the Indemnified Party (including reasonable fees and expenses to the extent incurred in connection with investigating or preparing to defend such Proceeding in a manner not inconsistent with this Section) shall be paid to the Indemnified Party, as incurred, within thirty (30) calendar days of written notice thereof to the Indemnifying Party; provided, that, the Indemnified Party shall promptly reimburse the Indemnifying Party for that portion of such fees and expenses applicable to such actions for which such Indemnified Party is finally determined by a court of competent jurisdiction (which determination is not subject to appeal or further review) not to be entitled to indemnification hereunder.

(d) Contribution. If the indemnification under Section 6(a) or 6(b) is unavailable to an Indemnified Party or insufficient to hold an Indemnified Party harmless for any Losses, then each Indemnifying Party shall contribute to the amount paid or payable by such Indemnified Party, in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and Indemnified Party in connection with the actions, statements or omissions that resulted in such Losses as well as any other relevant equitable considerations. The relative fault of such Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission of a material fact, has been taken or made by, or relates to information supplied by, such Indemnifying Party or Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action, statement or omission. The amount paid or payable by a party as a result of any Losses shall be deemed to include, subject to the limitations set forth in this Agreement, any reasonable attorneys' or other fees or expenses incurred by such party in connection with any Proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for in this Section was available to such party in accordance with its terms. The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 6(d) were determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to in the immediately preceding paragraph. Notwithstanding the provisions of this Section 6(d), no Holder shall be required to contribute pursuant to this Section 6(d), in the aggregate, any amount in excess of the amount by which the net proceeds actually received by such Holder from the sale of the Registrable Securities subject to the Proceeding exceeds the amount of any damages that such Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission.

(e) The indemnity and contribution agreements contained in this Section are in addition to any liability that the Indemnifying Parties may have to the Indemnified Parties.

Section 7. Miscellaneous.

(a) Remedies. In the event of a breach by the Company or by a Holder of any of their respective obligations under this Agreement, each Holder or the Company, as the case may be, in addition to being entitled to exercise all rights granted by law and under this Agreement, including recovery of damages, shall be entitled to specific performance of its rights under this Agreement. Each of the Company and each Holder agrees that monetary damages would not provide adequate compensation for any losses incurred by reason of a breach by it of any of the provisions of this Agreement and hereby further agrees that, in the event of any action for specific performance in respect of such breach, it shall not assert or shall waive the defense that a remedy at law would be adequate.

(b) Prohibition on Filing Other Registration Statements. The Company shall not, other than as provided in the Purchase Agreement, file any other registration statements (specifically excluding a registration statement on Form S-8) until all Registrable Securities are registered pursuant to a Registration Statement that is declared effective by the Commission, provided that this Section 7(b) shall not prohibit the Company from filing amendments to registration statements filed prior to the date of this Agreement and shall not prohibit the Company from filing a registration statement for a primary offering by the Company, provided that the Company makes no offering of securities pursuant to such registration statement prior to the effective date of the Registration Statement required hereunder that includes all of the Registrable Securities.

(c) Amendments and Waivers. The provisions of this Agreement, including the provisions of this sentence, may not be amended, modified or supplemented, and waivers or consents to departures from the provisions hereof may not be given, unless the same shall be in writing and signed by the Company and the Holders of 51% or more of the then outstanding Registrable Securities (for purposes of clarification, this includes any Registrable Securities issuable upon exercise or conversion of any Security). If a Registration Statement does not register all of the Registrable Securities pursuant to a waiver or amendment done in compliance with the previous sentence, then the number of Registrable Securities to be registered for each Holder shall be reduced pro rata among all Holders and each Holder shall have the right to designate which of its Registrable Securities shall be omitted from such Registration Statement. Notwithstanding the foregoing, a waiver or consent to depart from the provisions hereof with respect to a matter that relates exclusively to the rights of a Holder or some Holders and that does not directly or indirectly affect the rights of other Holders may be given only by such Holder or Holders of all of the Registrable Securities to which such waiver or consent relates; provided, however, that the provisions of this sentence may not be amended, modified, or supplemented except in accordance with the provisions of the first sentence of this Section 7(c). No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of this Agreement unless the same consideration also is offered to all of the parties to this Agreement.

(d) Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be delivered as set forth in the Purchase Agreement.

(e) Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the successors and permitted assigns of each of the parties and shall inure to the benefit of each Holder. The Company may not assign (except by merger) its rights or obligations hereunder without the prior written consent of all of the Holders of the then outstanding Registrable Securities. Each Holder may assign their respective rights hereunder in the manner and to the Persons as permitted under the Purchase Agreement.

(f) [Intentionally Omitted]

(g) Execution and Counterparts. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original thereof.

(h) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be determined in accordance with the provisions of the Purchase Agreement.

(i) Cumulative Remedies. The remedies provided herein are cumulative and not exclusive of any other remedies provided by law.

(j) Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their reasonable best efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

(k) Headings. The headings in this Agreement are for convenience only, do not constitute a part of the Agreement and shall not be deemed to limit or affect any of the provisions hereof.

(o) Independent Nature of Holders' Obligations and Rights. The obligations of each Holder hereunder are several and not joint with the obligations of any other Holder hereunder, and no Holder shall be responsible in any way for the performance of the obligations of any other Holder hereunder. Nothing contained herein or in any other agreement or document delivered at any closing, and no action taken by any Holder pursuant hereto or thereto, shall be deemed to constitute the Holders as a partnership, an association, a joint venture or any other kind of group or entity, or create a presumption that the Holders are in any way acting in concert or as a group or entity with respect to such obligations or the transactions contemplated by this Agreement or any other matters, and the Company acknowledges that the Holders are not acting in concert or as a group, and the Company shall not assert any such claim, with respect to such obligations or transactions. Each Holder shall be entitled to protect and enforce its rights, including without limitation the rights arising out of this Agreement, and it shall not be necessary for any other Holder to be joined as an additional party in any proceeding for such purpose. The use of a single agreement with respect to the obligations of the Company contained was solely in the control of the Company, not the action or decision of any Holder, and was done solely for the convenience of the Company and not because it was required or requested to do so by any Holder. It is expressly understood and agreed that each provision contained in this Agreement is between the Company and a Holder, solely, and not between the Company and the Holders collectively and not between and among Holders.

****

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties have executed this Registration Rights Agreement as of the date first written above.

ARCH THERAPEUTICS, INC.

By: _____
Name:
Title:

[Signature Page of Holders Follows]

[SIGNATURE PAGE OF HOLDERS]

Name of Holder: _____

Signature of Authorized Signatory of Holder: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Name of Holder: _____

Signature of Authorized Signatory of Holder: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

[Signature Pages Continue]

Exhibit 10.5

AMENDMENT NO. 5
TO
SENIOR SECURED CONVERTIBLE PROMISSORY NOTE

This Amendment No. 5 (this "Amendment") to those certain Senior Secured Convertible Promissory Notes, as amended on February 14, 2023, and as subsequently amended on March 10, 2023, March 15, 2023 and April 15, 2023 (as amended, the "First Notes"), issued by Arch Therapeutics, Inc., a Nevada corporation (the "Company"), to each Holder pursuant to that certain Securities Purchase Agreement, dated July 6, 2022, by and among the Company and the signatories thereto (the "Holders"), as amended on January 18, 2023 (as amended, the 'Securities Purchase Agreement") is made and entered into effective May 15, 2023 by and among the Company and the Consenting Stockholders (as defined below). Capitalized terms used herein but not otherwise defined shall have the meanings ascribed to them in the Securities Purchase Agreement.

W I T N E S S E T H:

WHEREAS, the Company and the Consenting Stockholders desire to amend the First Notes to extend the date for completion of the Uplist;

WHEREAS, pursuant to Section 4.3 of the First Notes and Section 7(e) of the Securities Purchase Agreement, the First Notes may be amended in a written instrument signed by the Company, the Lead Investor, and Holders which purchased at least 50% plus $1.00 of the Notes based on the initial Principal Amounts thereunder (the Lead Investor and such Holders, collectively the "Consenting Stockholders"); and

WHEREAS, the undersigned Holders constitute the Consenting Stockholders.

NOW, THEREFORE, in exchange for good and valuable consideration including, without limitation, the mutual covenants contained herein, the sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the parties hereby agree as follows:

1. Amendment to the First Notes.

1.1 The First Notes are hereby amended by deleting the words "by May 15, 2023" in Section 3.23 of the First Notes and replacing such words with the following sentence in substitution therefor:

"by June 15, 2023"

2. Miscellaneous

2.1 Except as expressly amended by this Amendment, the terms and provisions of the First Notes shall continue in full force and effect. No reference to this Amendment need be made in any instrument or document making reference to the First Notes; any reference to the First Notes in any such instrument or document shall be deemed a reference to the First Notes as amended hereby. The First Notes as amended hereby shall be binding upon the parties thereto and their respective assigns and successors.

2.2 This Amendment shall be governed by and construed in accordance with the laws of the State of Nevada as such laws are applied to agreements between parties in Nevada.

2.3 This Amendment may be executed in separate counterparts, each such counterpart being deemed to be an original instrument, and all such counterparts shall together constitute the same agreement.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

ARCH THERAPEUTICS, INC.

By: _____
Name: Michael S. Abrams
Title: Chief Financial Officer

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

[ ]

By: _____
Name:
Title:

Signature Page to Amendment No. 5 to First Notes

Exhibit 10.6

AMENDMENT NO. 5
TO
UNSECURED CONVERTIBLE PROMISSORY NOTE

This Amendment No. 5 (this "Amendment") to those certain Unsecured Convertible Promissory Notes, as amended on February 14, 2023, and as subsequently amended on March 10, 2023, March 15, 2023 and April 15, 2023 (as amended, the "Second Notes"), issued by Arch Therapeutics, Inc., a Nevada corporation (the "Company"), to certain Holders pursuant to that certain Securities Purchase Agreement, dated July 6, 2022, by and among the Company and the signatories thereto (the "Holders"), as amended on January 18, 2023 (as amended, the 'Securities Purchase Agreement") is made and entered into effective May 15, 2023 by and among the Company and the Consenting Stockholders (as defined below). Capitalized terms used herein but not otherwise defined shall have the meanings ascribed to them in the Securities Purchase Agreement.

W I T N E S S E T H:

WHEREAS, the Company and the Consenting Stockholders desire to amend the Second Notes to extend the date for completion of the Uplist;

WHEREAS, pursuant to Section 4.3 of the Second Notes and Section 7(e) of the Securities Purchase Agreement, the Second Notes may be amended in a written instrument signed by the Company, the Lead Investor, and Holders which purchased at least 50% plus $1.00 of the Notes based on the initial Principal Amounts thereunder (the Lead Investor and such Holders, collectively the "Consenting Stockholders"); and

WHEREAS, the undersigned Holders constitute the Consenting Stockholders.

NOW, THEREFORE, in exchange for good and valuable consideration including, without limitation, the mutual covenants contained herein, the sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the parties hereby agree as follows:

1. Amendment to the Second Notes.

1.1 The Second Notes are hereby amended by deleting the words "by May 15, 2023" in Section 3.23 of the Second Notes and replacing such words with the following in substitution therefor:

"by June 15, 2023"

2. Miscellaneous

2.1 Except as expressly amended by this Amendment, the terms and provisions of the Second Notes shall continue in full force and effect. No reference to this Amendment need be made in any instrument or document making reference to the Second Notes; any reference to the Second Notes in any such instrument or document shall be deemed a reference to the Second Notes as amended hereby. The Second Notes as amended hereby shall be binding upon the parties thereto and their respective assigns and successors.

2.2 This Amendment shall be governed by and construed in accordance with the laws of the State of Nevada as such laws are applied to agreements between parties in Nevada.

2.3 This Amendment may be executed in separate counterparts, each such counterpart being deemed to be an original instrument, and all such counterparts shall together constitute the same agreement.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

ARCH THERAPEUTICS, INC.

By: _____
Name: Michael S. Abrams
Title: Chief Financial Officer

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

[ ]

By: _____
Name:
Title:

Signature Page to Amendment No. 5 to Second Notes

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 22, 2023

/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.

Dated: May 22, 2023

/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, 2023 fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, and that the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 22, 2023

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

Dated: May 22, 2023

/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.