

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 8-K**

**CURRENT REPORT**

**Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): **May 15, 2024**

**ARCH THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

**Nevada**  
(State or other jurisdiction  
of incorporation)

**000-54986**  
(Commission  
File Number)

**46-0524102**  
(I.R.S. Employer  
Identification No.)

**235 Walnut Street, Suite 6**  
**Framingham, Massachusetts**  
(Address of principal executive offices)

**01702**  
(Zip Code)

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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 is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

Emerging growth company

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

**Item 1.01 Entry into a Material Definitive Agreement.**

Arch Therapeutics, Inc. (the "**Company**") entered into a Securities Purchase Agreement, dated May 15, 2024 (the "**SPA**"), with certain institutional and accredited individual investors (collectively, the "**Investors**") who have previously purchased secured promissory notes from the Company, providing for the issuance and sale by the Company to the Investors certain Secured Promissory Notes (each a "**2024 First Note**" and collectively, the "**2024 First Notes**") convertible into shares of common stock, par value \$0.001 per share (the "**Common Stock**"). The 2024 First Notes were issued as part of a convertible notes offering authorized by the Company's board of directors (the "**Convertible Notes Offering**").

In connection with the Convertible Notes Offering, the Company issued and sold to the Investors the 2024 First Notes in the aggregate principal amount of \$2,220,000, which includes an aggregate \$370,000 original issue discount in respect of the 2024 First Notes. The aggregate net proceeds for the sale of the 2024 First Notes was approximately \$1,850,000, after deducting issuance discounts. The closing of the sales of the 2024 First Notes under the SPA occurred on May 15, 2024 (the "**Closing Date**").

*Use of Proceeds*

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

*2024 First Notes*

The 2024 First Notes become due and payable on June 30, 2024 (the "**Maturity Date**") and may be prepaid provided that an Event of Default (as defined therein) has not occurred. The 2024 First 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 2024 First 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 2024 First Notes. Any amount of principal or interest on the 2024 First 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 2024 First Notes are convertible into an aggregate of 4,440,000 shares of Common Stock (such shares of Common Stock, the **“Conversion Shares”**) at the option of each holder of the 2024 First Notes (a **“Holder”** and, all holders of 2024 First Notes together, the **“Holders”**) from the 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 2024 First Note); *provided, however*, certain 2024 First Notes include a provision preventing such conversion if, as a result, the Holder, together with its affiliates and any other persons whose beneficial ownership of Company Common Stock would be aggregated with the Holder’s, would be deemed to beneficially own more than 4.99% of the outstanding shares of the Company’s Common Stock (the **“Notes Ownership Limitation”**) immediately after giving effect to the Conversion; and *provided further*, the Holder, upon notice to the Company, may increase or decrease the Notes Ownership Limitation; *provided that* (i) the Notes Ownership Limitation may only be increased to a maximum of 9.99% of the outstanding shares of the Company’s Common Stock; and (ii) any increase in the Notes Ownership Limitation will not become effective until the 61st day after delivery of such waiver notice.

The initial conversion price of the 2024 First Notes (the **“Conversion Price”**) shall be equal to \$0.50 per share and may be reduced or increased proportionately as a result of any stock dividends, recapitalizations, reorganizations, and similar transactions. If the Company fails to deliver the shares of Common Stock issuable upon a conversion by the Deadline (as defined in the 2024 First Notes), then the Company is obligated to pay such 2024 First Note Holder \$5,000 per day in cash for each day beyond the Deadline.

The 2024 First Notes contain customary events of default, which include, among other things, (i) the Company’s failure to pay when due any principal or interest payment under the 2024 First Notes; (ii) the insolvency of the Company; (iii) delisting of the Company’s Common Stock; (iv) the Company’s breach of any material covenant or other material term or condition under the 2024 First Notes; and (v) the Company’s breach of any representations or warranties under the 2024 First Notes which cannot be cured within five days. Further, Events of Default under the 2024 First Notes also include (i) the unavailability of Rule 144 on or after six months from the Issue Date (as defined therein); (ii) the Company’s failure to deliver the shares of Common Stock to the 2024 First Note Holder upon exercise by such Holder of its conversion rights under the 2024 First Note; (iii) the Company’s 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) the Company’s failure to complete an uplist to a National Exchange (as defined therein) by June 30, 2024.

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Upon an Event of Default, the 2024 First Notes shall become immediately due and payable and the Company shall pay to each 2024 First Note Holder an amount equal to 125% (the **“Default Premium”**) multiplied by the sum of the outstanding principal amount of the 2024 First Notes plus any accrued and unpaid interest on the unpaid principal amount of the 2024 First Notes to the date of payment, plus any Default Interest and any other amounts owed to the Holder under the 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 2024 First 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.

Upon the closing of the transaction that results in the uplist of the Common Stock to a National Exchange, 100% of the then outstanding principal amount of the 2024 First Notes shall automatically convert (the **“Automatic Conversion”**) into shares of Common Stock (the **“Automatic Conversion Shares”**), with the conversion price for purposes of such Automatic Conversion being \$0.515625 per share. Upon the Automatic Conversion and to the extent that the beneficial ownership of a Holder of 2024 First Notes would increase over the applicable Notes Ownership Limitation, the Holder will receive pre-funded warrants (the **“2024 Note Conversion Pre-Funded Warrants”**), and the shares issuable upon exercise thereof, the **“2024 Note Conversion Pre-Funded Warrant Shares”**) in lieu of shares of Common Stock otherwise issuable to the Holder in connection with the Automatic Conversion, which 2024 Note Conversion Pre-Funded Warrants shall have an exercise price of \$0.000125 per share, may be exercised on a cashless basis, shall be exercisable immediately upon issuance and shall contain a customary beneficial ownership limitation provision.

In addition, upon the Automatic Conversion, the Holder shall receive a warrant (the **“Uplist Conversion Warrant”**), and the shares issuable upon exercise thereof, the **“Uplist Conversion Warrant Shares”**) to purchase a number of shares of Common Stock equal to the number of shares of Common Stock (or shares of Common Stock underlying 2024 Note Conversion Pre-Funded Warrants, if any) issued upon the Automatic Conversion. The Uplist Conversion Warrant shall have an exercise price per share of \$0.50 and shall otherwise be identical to the warrants (other than pre-funded warrants) sold pursuant to the securities purchase agreement dated November 8, 2023, as amended. The Company also agreed in the 2024 First Notes to file no later than 60 days after the closing of an uplist to a National Exchange a registration statement on Form S-4, or other appropriate form, registering the offer by the Company to exchange, on a one-for-one basis, all outstanding Uplist Conversion Warrants and certain other warrants for newly issued warrants identical to the warrants being sold in the offering that results in the uplist to a National Exchange, which warrants are expected to be listed on the Cboe BZX Exchange, Inc. under the symbol **“ARTHW.”**

#### *Registration Rights Agreement*

On the Closing Date, the Company entered into a Registration Rights Agreement with the Investors (the **“Registration Rights Agreement”**), pursuant to which the Company is obligated, subject to certain conditions, to file with the Securities and Exchange Commission within 60 days after the Closing Date one or more registration statements (any such registration statement, a **“Resale Registration Statement”**) to register the Conversion Shares for resale under the Securities Act of 1933, as amended (the **“Securities Act”**). The Company’s failure to satisfy certain filing and effectiveness deadlines with respect to a Resale Registration Statement and certain other requirements set forth in the Registration Rights Agreement may subject the Company to payment of monetary penalties.

#### *Security Agreement*

In connection with the issuance of the 2024 First Notes, the Company entered into a Security Agreement with the Collateral Agent (as defined therein) on behalf of the Investors on the Closing Date (the **“Security Agreement”**), pursuant to which the Company and each of its subsidiaries (together with any persons who execute a joinder to the Security Agreement, the **“Debtors”**) provided as collateral to the Investors a security interest in, and a lien on, substantially all of the Debtors. Upon an Event of Default under the 2024 First Notes, each Investor may exercise its rights to the collateral pursuant to the terms of the Security Agreement.

#### *IP Security Agreement*

In connection with the issuance of the 2024 First Notes, the Company also entered into an Intellectual Property Security Agreement with the Collateral Agent (as defined therein) on behalf of the Investors on the Closing Date (the **“IP Security Agreement”**), pursuant to which the Company and each of its subsidiaries (together with any persons who execute a joinder to the Security Agreement, the **“IP Debtors”**) provided as collateral to the Investors a security interest in, and a lien on, substantially all of the IP Debtors. Upon an Event of Default under the 2024 First Notes, each Investor may exercise its rights to the collateral pursuant to the terms of the Security Agreement.

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#### *Certain Restrictions on Activities*

The SPA contains certain restrictions on the Company’s ability to conduct subsequent sales of its equity securities and certain business activities. In particular, subject to certain customary exemptions, from the Closing Date, until 30 days after the Resale Registration Statement goes effective, the Company shall not file any registration statement with respect to the Company’s Common Stock.

The issuance and sale of the 2024 First Notes has not been, and will not upon issuance be, registered under the Securities Act, and the 2024 First Notes 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 Securities Act based on the following facts:

each of the 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; the Company used no advertising or general solicitation in connection with the issuance and sale of the 2024 First Notes to the Investors; and the Securities will be issued as restricted securities. This Current Report on Form 8-K is not and shall not be deemed to be an offer to sell or the solicitation of an offer to buy any of the 2024 First Notes.

The preceding descriptions of the SPA, 2024 First Notes, Registration Rights Agreement, Security Agreement and IP Security Agreement are qualified in their entirety by reference to the copies of the Forms of Securities Purchase Agreement, 2024 First Note, Registration Rights Agreement, Security Agreement and IP Security Agreement filed herewith as **Exhibit 10.1**, **Exhibit 10.2**, **Exhibit 10.3**, **Exhibit 10.4**, and **Exhibit 10.5** to this Current Report on Form 8-K, respectively, which are incorporated herein by reference.

**Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.**

Reference is made to the disclosure set forth in **Item 1.01** of this Current Report on Form 8-K, which disclosure is incorporated by reference into this **Item 2.03**.

**Item 3.02 Unregistered Sales of Equity Securities.**

Reference is made to the disclosure set forth in **Item 1.01** of this Current Report on Form 8-K, which disclosure is incorporated by reference into this **Item 3.02**.

**Item 9.01 Financial Statements and Exhibits.**

(d) The following exhibits are being filed herewith:

<b>Exhibit</b>	<b>Description</b>
10.1	<a href="#">Form of Securities Purchase Agreement</a>
10.2	<a href="#">Form of 2024 First Note</a>
10.3	<a href="#">Form of Registration Rights Agreement</a>
10.4	<a href="#">Form of Security Agreement</a>
10.5	<a href="#">Form of IP Security Agreement</a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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**SIGNATURES**

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

**ARCH THERAPEUTICS, INC.**

Dated: May 21, 2024

By: /s/ Terrence W. Norchi, M.D.  
Name: Terrence W. Norchi, M.D.  
Title: President, Chief Executive Officer

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## SECURITIES PURCHASE AGREEMENT

This **SECURITIES PURCHASE AGREEMENT** (the “Agreement”), dated as of May \_\_, 2024 (the “Effective Date”), by **ARCH THERAPEUTICS, INC.**, a Nevada corporation, with headquarters located at 235 Walnut Street, Suite 6, Framingham, MA 01702 (the “Company”), and each buyer identified on the signature pages hereto (each, including its successors and assigns, a “Buyer” and collectively, the “Buyers”).

## WHEREAS:

A. The Company and the Buyers are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by the rules and regulations as promulgated by the United States Securities and Exchange Commission (the “SEC”) under the Securities Act of 1933, as amended (the “1933 Act”);

B. 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, 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”), (the “First Closing”), and (ii) each Buyer, severally and not jointly, may desire to purchase and the Company may desire to sell and issue to Buyers, one or more additional convertible promissory notes convertible into shares of Common Stock, each in the form attached hereto as Exhibit A (the “Additional Notes” and together with the First Notes, the “Notes”), as may mutually be agreed in additional closings as set forth in Section 1(d) below (the “Additional Closings”) (each of the First Closing and the Additional Closings are sometimes hereinafter individually referred to as a “Closing” and collectively as the “Closings” and this Agreement any and all documents or instruments executed or to be executed by in connection with this Agreement, including the Notes, the Security Agreement, in the form attached as Exhibit B hereto (the “Security Agreement”), the Guaranty, in the form attached as Exhibit C hereto (the “Guaranty”), the Registration Rights Agreement, in the form attached as Exhibit D hereto (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”);

C. WHEREAS, the aggregate principal amount of Notes sold pursuant to this Agreement shall not exceed two million seven hundred seventy five thousand and No/100 United States Dollars (US\$2,775,000) (the “Maximum Amount”), which amount can be increased by mutual agreement of the Company and the Buyers that are majority-in-interest holders of the outstanding Notes; and

D. WHEREAS, certain investors (the “Advance Holders”) who have advanced funds (the “Advances”) to the Company in prepayment of their obligations under the Securities Purchase Agreement dated November 8, 2023, among the Company and the purchasers party thereto (the “Uplist PIPE SPA”), desire to exchange their Advances for Notes hereunder, and the Company agrees to permit such exchange.

**NOW THEREFORE**, the Company and the Buyers severally (and not jointly) hereby agree as follows:

1. PURCHASE AND SALE OF NOTE.

a. Purchase of Notes. Subject to the satisfaction (or waiver) of the terms and conditions of this Agreement, each Buyer, severally and not jointly, agrees to purchase, at each Closing, and Company agrees to sell and issue to Buyers, at each Closing, a Note in the principal amount applicable to each Closing as more specifically set forth below.

b. First Closing. The First Closing of the purchase and sale of the First Notes in an aggregate principal amount of two million two hundred twenty and No/100 United States Dollars (US\$2,220,000), for an aggregate purchase price of one million eight hundred fifty No/100 United States Dollars (US\$1,850,000), 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 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, and (y) in the case of each Advance Holder, the surrender of Advances in respect of which the amount owing thereunder is set forth opposite such Advance Holder’s name in column (4) on the Schedule of Buyers hereto. Additional Closings, if any, of the purchase and sale of the Notes 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, 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.

c. Form of Payment. On each Closing Date, each Buyer shall pay the purchase price set forth on the face thereof for a Note to be issued and sold to such Buyer at such Closing (the “Purchase Price”) by wire transfer of immediately available funds to the Company, in accordance with the Company’s written wiring instructions, against delivery of such Note to such Buyer in the principal amount set forth on the face thereof or in the case of an Advance Holder, surrender of Advances to the Company (which surrender shall be satisfied through such Advance Holder’s inclusion of the subject Advances on the Schedule of Buyers), and the Company shall deliver such duly executed Note on behalf of the Company, to such Buyer, against delivery of such Purchase Price or surrender of such Advances.

d. Additional Closings. Provided that the Maximum Amount shall be sufficient in respect of such additional Notes, at any time after the First Closing but prior to the maturity date of any of the Notes issued in the First Closing, the Company may request that Buyers purchase additional Notes hereunder in Additional Closings by written notice to each Buyer, and, subject to the conditions below, each Buyer shall purchase such additional Notes in such amounts and at such times as such Buyer and the Company may mutually agree, so long as no default or “Event of Default” (as such term is defined in any of the Transaction Documents) shall have occurred or be continuing under this Agreement or any other Transaction Documents, and no event shall have occurred that, with the passage of time, the giving of notice, or both, would constitute a default or an Event of Default hereunder or thereunder; and any additional purchase of Notes beyond the purchase of Notes at the First Closing shall have been approved by each Buyer participating in the Additional Closing, which approval may be given or withheld in such Buyer’s sole and absolute discretion.

2. REPRESENTATIONS AND WARRANTIES OF THE BUYERS. Each Buyer represents and warrants to the Company that:

a. Investment Purpose. As of the date hereof, the Buyer is purchasing the Notes and the shares of Common Stock issuable upon conversion of or otherwise pursuant to the Notes (the “Conversion Shares,” and together with the Notes, the “Securities”) for its own account and not with a present view towards the public sale or distribution thereof, except pursuant to sales registered or exempted from registration under the 1933 Act; provided, however, that by making the representations herein, the Buyer does not agree to hold any of the Securities for any minimum or other specific term and reserves the right to dispose of the Securities at any time in accordance with or pursuant to a registration statement or an exemption under the 1933 Act.

b. Accredited Investor Status. The Buyer is an “accredited investor” as that term is defined in Rule 501(a) of Regulation D (an “Accredited Investor”).

c. Reliance on Exemptions. The Buyer understands that the Securities are being offered and sold to it in reliance upon specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying upon the truth and accuracy of, and the Buyer’s compliance with, the

representations, warranties, agreements, acknowledgments and understandings of the Buyer set forth herein in order to determine the availability of such exemptions and the eligibility of the Buyer to acquire the Securities.

d. Information. The Buyer and its advisors, if any, have been, and for so long as any Note remains outstanding will continue to be, furnished with all materials relating to the business, finances and operations of the Company and materials relating to the offer and sale of the Securities which have been requested by the Buyer or its advisors. The Buyer and its advisors, if any, have been, and for so long as any Note remains outstanding will continue to be, afforded the opportunity to ask questions of the Company. Notwithstanding the foregoing, the Company has not disclosed to the Buyer any material nonpublic information and will not disclose such information unless such information is disclosed to the public prior to or promptly following such disclosure to the Buyer. Neither such inquiries nor any other due diligence investigation conducted by Buyer or any of its advisors or representatives shall modify, amend or affect Buyer's right to rely on the Company's representations and warranties contained in Section 3 below. The Buyer understands that its investment in the Securities involves a significant degree of risk. The Buyer is not aware of any facts that may constitute a breach of any of the Company's representations and warranties made herein.

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e. Governmental Review. The Buyer understands that no United States federal or state agency or any other government or governmental agency has passed upon or made any recommendation or endorsement of the Securities.

f. Transfer or Re-sale. The Buyer understands that the sale or re-sale of the Securities has not been and is not being registered under the 1933 Act or any applicable state securities laws, and the Securities may not be transferred unless the Securities are sold pursuant to an effective registration statement under the 1933 Act, the Buyer shall have delivered to the Company, at the cost of the Company, an opinion of counsel that shall be in form, substance and scope customary for opinions of counsel in comparable transactions to the effect that the Securities to be sold or transferred may be sold or transferred pursuant to an exemption from such registration, which opinion shall be accepted by the Company, the Securities are sold or transferred to an "affiliate" (as defined in Rule 144 promulgated under the 1933 Act (or a successor rule) ("Rule 144")) of the Buyer who agrees to sell or otherwise transfer the Securities only in accordance with this Section 2(f) and who is an Accredited Investor, the Securities are sold pursuant to Rule 144, or the Securities are sold pursuant to Regulation S under the 1933 Act (or a successor rule) ("Regulation S"), and the Buyer shall have delivered to the Company, at the cost of the Company, not to exceed \$300 per opinion, an opinion of counsel that shall be in form, substance and scope customary for opinions of counsel in corporate transactions, which opinion shall be accepted by the Company; (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of said Rule and further, if said Rule is not applicable, any re-sale of such Securities under circumstances in which the seller (or the person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the 1933 Act) may require compliance with some other exemption under the 1933 Act or the rules and regulations of the SEC thereunder; and (iii) except as otherwise provided herein, neither the Company nor any other person is under any obligation to register the Securities under the 1933 Act or any state securities laws or to comply with the terms and conditions of any exemption thereunder (in each case). Notwithstanding the foregoing or anything else contained herein to the contrary, the Securities may be pledged as collateral in connection with a *bona fide* margin account or other lending arrangement. In the event that the Company unreasonably rejects the opinion of counsel provided by the Buyer with respect to the transfer of Securities pursuant to an exemption from registration, such as Rule 144 or Regulation S, within three (3) business days of delivery of the opinion to the Company, the Company shall pay to the Buyer liquidated damages of One Thousand Dollars (\$1,000) per day plus accrued and unpaid interest on such Note, prorated for partial months, in cash or shares at the option of the Buyer ("Standard Liquidated Damages Amount"). If the Buyer elects to be pay the Standard Liquidated Damages Amount in shares of Common Stock, such shares shall be issued at the Conversion Price (as defined in the Note) at the time of payment.

g. Legends. The Buyer understands that each Note and, until such time as the Conversion Shares have been registered under the 1933 Act may be sold pursuant to Rule 144 or Regulation S without any restriction as to the number of securities as of a particular date that can then be immediately sold, the Conversion Shares may bear a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of the certificates for such Securities):

**"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."**

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The legend set forth above shall be removed and the Company shall issue a certificate without such legend to the holder of any Security upon which it is stamped, if, unless otherwise required by applicable state securities laws, (a) such Security is registered for sale under an effective registration statement filed under the 1933 Act or otherwise may be sold pursuant to Rule 144 or Regulation S without any restriction as to the number of securities as of a particular date that can then be immediately sold, or (b) such holder provides the Company with 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 Security may be made without registration under the 1933 Act, which opinion shall be accepted by the Company so that the sale or transfer is effected. The Buyer agrees to sell all Securities, including those represented by a certificate(s) from which the legend has been removed, in compliance with applicable prospectus delivery requirements, if any, and to use commercially reasonable efforts to promptly sell such Securities following the Buyer's receipt thereof. In the event that the Company unreasonably rejects the opinion of counsel provided by the Buyer with respect to the transfer of Securities pursuant to an exemption from registration, such as Rule 144 or Regulation S, at the Deadline (as such term is defined in Section 1.4(d) of the Note), it will be considered an Event of Default pursuant to Section 3.2 of the Note.

h. Authorization; Enforcement. This Agreement has been duly and validly authorized. This Agreement has been duly executed and delivered on behalf of the Buyer, and this Agreement constitutes a valid and binding agreement of the Buyer enforceable in accordance with its terms.

i. Residency. The Buyer is organized in the jurisdiction set forth on its respective signature page.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company makes the following representations and warranties to each Buyer, each of which shall be true and correct in all respects as of the date of the execution and delivery of this Agreement and as of the date of each Closing hereunder, and which shall survive the execution and delivery of this Agreement:

a. Organization and Qualification. The Company and each of its Subsidiaries (as defined below), if any, is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated, with full power and authority (corporate and other) to own, lease, use and operate its properties and to carry on its business as and where now owned, leased, used, operated and conducted. The Company and each of its Subsidiaries is duly qualified as a foreign corporation to do business and is in good standing in every jurisdiction in which its ownership or use of property or the nature of the business conducted by it makes such qualification necessary except where the failure to be so qualified or in good standing would not have a Material Adverse Effect. "Material Adverse Effect" means any material adverse effect on the business, operations, assets, financial condition or prospects of the Company or its Subsidiaries, if any, taken as a whole, or on the transactions contemplated hereby or by the agreements or instruments to be entered into in connection herewith. "Subsidiaries" means any corporation or other organization, whether incorporated or unincorporated, in which the Company owns, directly or indirectly, any equity or other ownership interest.

b. Authorization; Enforcement. (i) The Company has all requisite corporate power and authority to enter into, deliver and perform this Agreement, the Notes and to consummate the transactions contemplated hereby and thereby and to issue the Securities, in accordance with the terms hereof and thereof, (ii) the execution and delivery of this Agreement, the Notes by the Company and the consummation by it of the transactions contemplated hereby and thereby (including without limitation, the issuance of the Note and the issuance and reservation for issuance of the Conversion Shares issuable upon conversion or exercise thereof) have been duly authorized by the Company's Board of Directors and no further consent or authorization of the Company, its Board of Directors, or its shareholders is required, (iii) this Agreement has been duly executed and delivered by the Company by its authorized representative, and such authorized representative is the true and official representative with authority to sign this Agreement and the other documents executed in connection herewith and bind the Company accordingly, and (iv) this Agreement constitutes, and upon execution and delivery by the Company of each Note, each of such instruments will constitute, a legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms.

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c. Capitalization. As of December 31, 2023, as disclosed in the SEC Documents, the authorized capital stock of the Company consists of 350,000,000 shares of Common Stock, of which 4,742,364 shares are issued and outstanding. Except as disclosed in the SEC Documents, no shares are reserved for issuance pursuant to the Company's stock option plan, no shares are reserved for issuance pursuant to securities (other than the Notes) exercisable for, or convertible into or exchangeable for shares of Common Stock, and an aggregate of 4,440,000 shares are reserved for issuance upon conversion of the Notes. All of such outstanding shares of capital stock are, or upon issuance will be, duly authorized, validly issued, fully paid and non-assessable. No shares of capital stock of the Company are subject to preemptive rights or any other similar rights of the shareholders of the Company or any liens or encumbrances imposed through the actions or failure to act of the Company. Except as disclosed in the SEC Documents, as of the effective date of this Agreement, (i) there are no outstanding options, warrants, scrip, rights to subscribe for, puts, calls, rights of first refusal, agreements, understandings, claims or other commitments or rights of any character whatsoever relating to, or securities or rights convertible into or exchangeable for any shares of capital stock of the Company or any of its Subsidiaries, or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional shares of capital stock of the Company or any of its Subsidiaries, (ii) there are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of its or their securities under the 1933 Act and (iii) there are no anti-dilution or price adjustment provisions contained in any security issued by the Company (or in any agreement providing rights to security holders) that will be triggered by the issuance of the Note or the Conversion Shares. The Company has filed in its SEC Documents true and correct copies of the Company's Certificate of Incorporation as in effect on the date hereof ("Certificate of Incorporation"), the Company's By-laws, as in effect on the date hereof (the "By-laws"), and the terms of all securities convertible into or exercisable for Common Stock of the Company and the material rights of the holders thereof in respect thereto. The Company shall provide each Buyer with a written update of this representation signed by the Company's Chief Executive Officer on behalf of the Company as of each Closing Date.

d. Issuance of Shares. The issuance of each Note is duly authorized and, upon issuance in accordance with the terms of this Agreement, will be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, taxes, liens, charges and other encumbrances with respect to the issue thereof. The Conversion Shares are duly authorized and reserved for issuance and, upon conversion of each Note in accordance with its terms, will be validly issued, fully paid and non-assessable, and 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 Company and will not impose personal liability upon the holder thereof.

e. Acknowledgment of Dilution. The Company understands and acknowledges the potentially dilutive effect to the Common Stock upon the issuance of the Conversion Shares upon conversion of each Note. The Company further acknowledges that its obligation to issue Conversion Shares upon conversion of each Note in accordance with this Agreement or the Note, as applicable, is absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other shareholders of the Company.

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f. No Conflicts. The execution, delivery and performance of this Agreement and the Notes by the Company and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance and reservation for issuance of the Conversion Shares) will not (i) conflict with or result in a violation of any provision of the Certificate of Incorporation or By-laws, or (ii) violate or conflict with, or result in a breach of any provision of, or constitute a default (or an event which with notice or lapse of time or both could become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture, patent, patent license or instrument to which the Company or any of its Subsidiaries is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations and regulations of any self-regulatory organizations to which the Company or its securities are subject) applicable to the Company or any of its Subsidiaries or by which any property or asset of the Company or any of its Subsidiaries is bound or affected (except for such conflicts, defaults, terminations, amendments, accelerations, cancellations and violations as would not, individually or in the aggregate, have a Material Adverse Effect). Neither the Company nor any of its Subsidiaries is in violation of its Certificate of Incorporation, By-laws or other organizational documents and neither the Company nor any of its Subsidiaries is in default (and no event has occurred which with notice or lapse of time or both could put the Company or any of its Subsidiaries in default) under, and neither the Company nor any of its Subsidiaries has taken any action or failed to take any action that would give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company or any of its Subsidiaries is a party or by which any property or assets of the Company or any of its Subsidiaries is bound or affected, except for possible defaults as would not, individually or in the aggregate, have a Material Adverse Effect. The businesses of the Company and its Subsidiaries, if any, are not being conducted, and shall not be conducted so long as any Buyer owns any of the Securities, in violation of any law, ordinance or regulation of any governmental entity. Except as specifically contemplated by this Agreement and as required under the 1933 Act and any applicable state securities laws, the Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court, governmental agency, regulatory agency, self-regulatory organization or stock market or any third party in order for it to execute, deliver or perform any of its obligations under this Agreement and the Notes in accordance with the terms hereof or thereof or to issue and sell the Notes in accordance with the terms hereof and to issue the Conversion Shares upon conversion of the Notes. All consents, authorizations, orders, filings and registrations which the Company is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the date hereof. The Company is not in violation of the listing requirements of the Over-the-Counter Bulletin Board (the "OTCBB"), the OTCQB or any similar quotation system, and does not reasonably anticipate that the Common Stock will be delisted by the OTCBB, the OTCQB or any similar quotation system, in the foreseeable future nor are the Company's securities "chilled" by DTC. The Company and its Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing.

g. SEC Documents; Financial Statements. The Company has filed all quarterly and annual reports required to be filed by it with the SEC pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "1934 Act") (all of the foregoing filed prior to the date hereof and all exhibits included therein and financial statements and schedules thereto and documents (other than exhibits to such documents) incorporated by reference therein, being hereinafter referred to herein as the "SEC Documents"). The Company has delivered to each Buyer true and complete copies of the SEC Documents, except for such exhibits and incorporated documents, and except as such Documents are available EDGAR filings on the SEC's sec.gov website. As of their respective dates, the SEC Documents complied in all material respects with the requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. None of the statements made in any such SEC Documents is, or has been, required to be amended or updated under applicable law (except for such statements as have been amended or updated in subsequent filings prior to the date hereof). As of their respective dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with United States generally accepted accounting principles, consistently applied, during the periods involved and fairly present in all material respects the consolidated financial position of the Company and its consolidated Subsidiaries as of the dates thereof and the consolidated results of their operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments). Except as set forth in the financial statements of the Company included in the SEC Documents, the Company has no liabilities, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to December 31, 2023, and (ii) obligations under

contracts and commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in such financial statements, which, individually or in the aggregate, are not material to the financial condition or operating results of the Company. The Company is subject to the reporting requirements of the 1934 Act. For the avoidance of doubt, filing of the documents required in this Section 3(g) via the SEC's Electronic Data Gathering, Analysis, and Retrieval system ("EDGAR") shall satisfy all delivery requirements of this Section 3(g).

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h. Absence of Certain Changes. Since December 31, 2023, there has been no material adverse change and no material adverse development in the assets, liabilities, business, properties, operations, financial condition, results of operations, prospects or 1934 Act reporting status of the Company or any of its Subsidiaries.

i. Absence of Litigation. There is no action, suit, claim, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company or any of its Subsidiaries, threatened against or affecting the Company or any of its Subsidiaries, or their officers or directors in their capacity as such, that could have a Material Adverse Effect. Schedule 3(i) contains a complete list and summary description of any pending or, to the knowledge of the Company, threatened proceeding against or affecting the Company or any of its Subsidiaries, without regard to whether it would have a Material Adverse Effect. The Company and its Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing.

j. Patents, Copyrights, etc. The Company and each of its Subsidiaries owns or possesses the requisite licenses or rights to use all patents, patent applications, patent rights, inventions, know-how, trade secrets, trademarks, trademark applications, service marks, service names, trade names and copyrights ("Intellectual Property") necessary to enable it to conduct its business as now operated (and, as presently contemplated to be operated in the future). Except as disclosed in the SEC Documents, there is no claim or action by any person pertaining to, or proceeding pending, or to the Company's knowledge threatened, which challenges the right of the Company or of a Subsidiary with respect to any Intellectual Property necessary to enable it to conduct its business as now operated (and, as presently contemplated to be operated in the future); to the best of the Company's knowledge, the Company's or its Subsidiaries' current and intended products, services and processes do not infringe on any Intellectual Property or other rights held by any person; and the Company is unaware of any facts or circumstances which might give rise to any of the foregoing. The Company and each of its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of their Intellectual Property.

k. No Materially Adverse Contracts, Etc. Neither the Company nor any of its Subsidiaries is subject to any charter, corporate or other legal restriction, or any judgment, decree, order, rule or regulation which in the judgment of the Company's officers has or is expected in the future to have a Material Adverse Effect. Neither the Company nor any of its Subsidiaries is a party to any contract or agreement which in the judgment of the Company's officers has or is expected to have a Material Adverse Effect.

l. Tax Status. The Company and each of its Subsidiaries has made or filed all federal, state and foreign income and all other tax returns, reports and declarations required by any jurisdiction to which it is subject (unless and only to the extent that the Company and each of its Subsidiaries has set aside on its books provisions reasonably adequate for the payment of all unpaid and unreported taxes) and has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and has set aside on its books provisions reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim. The Company has not executed a waiver with respect to the statute of limitations relating to the assessment or collection of any foreign, federal, state or local tax. None of the Company's tax returns is presently being audited by any taxing authority.

m. Certain Transactions. Except for arm's length transactions pursuant to which the Company or any of its Subsidiaries makes payments in the ordinary course of business upon terms no less favorable than the Company or any of its Subsidiaries could obtain from third parties and other than the grant of stock options disclosed on Schedule 3(c), none of the officers, directors, or employees of the Company is presently a party to any transaction with the Company or any of its Subsidiaries (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any corporation, partnership, trust or other entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee or partner.

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n. Disclosure. All information relating to or concerning the Company or any of its Subsidiaries set forth in this Agreement and provided to each Buyer pursuant to Section 2(d) hereof and otherwise in connection with the transactions contemplated hereby is true and correct in all material respects and the Company has not omitted to state any material fact necessary in order to make the statements made herein or therein, in light of the circumstances under which they were made, not misleading. No event or circumstance has occurred or exists with respect to the Company or any of its Subsidiaries or its or their business, properties, prospects, operations or financial conditions, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed (assuming for this purpose that the Company's reports filed under the 1934 Act are being incorporated into an effective registration statement filed by the Company under the 1933 Act).

o. Acknowledgment Regarding each Buyer's Purchase of Securities. The Company acknowledges and agrees that each Buyer is acting solely in the capacity of arm's length purchasers with respect to this Agreement and the transactions contemplated hereby. The Company further acknowledges that no Buyer is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to this Agreement and the transactions contemplated hereby and any statement made by a Buyer or any of its respective representatives or agents in connection with this Agreement and the transactions contemplated hereby is not advice or a recommendation and is merely incidental to the Buyer's purchase of the Securities. The Company further represents to each Buyer that the Company's decision to enter into this Agreement has been based solely on the independent evaluation of the Company and its representatives.

p. No Integrated Offering. Neither the Company, nor any of its affiliates, nor any person acting on its or their behalf, has directly or indirectly made any offers or sales in any security or solicited any offers to buy any security under circumstances that would require registration under the 1933 Act of the issuance of the Securities to the Buyers. The issuance of the Securities to the Buyers will not be integrated with any other issuance of the Company's securities (past, current or future) for purposes of any shareholder approval provisions applicable to the Company or its securities.

q. No Brokers. The Company has taken no action which would give rise to any claim by any person for brokerage commissions, transaction fees or similar payments relating to this Agreement or the transactions contemplated hereby.

r. Permits: Compliance. The Company and each of its Subsidiaries is in possession of all franchises, grants, authorizations, licenses, permits, easements, variances, exemptions, consents, certificates, approvals and orders necessary to own, lease and operate its properties and to carry on its business as it is now being conducted (collectively, the "Company Permits"), and there is no action pending or, to the knowledge of the Company, threatened regarding suspension or cancellation of any of the Company Permits. Neither the Company nor any of its Subsidiaries is in conflict with, or in default or violation of, any of the Company Permits, except for any such conflicts, defaults or violations which, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect. Since December 31, 2023, neither the Company nor any of its Subsidiaries has received any notification with respect to possible conflicts, defaults or violations of applicable laws, except for notices relating to possible conflicts, defaults or violations, which conflicts, defaults or violations would not have a Material Adverse Effect.

s. Environmental Matters.

(i) There are, to the Company's knowledge, with respect to the Company or any of its Subsidiaries or any predecessor of the Company, no past or present violations of Environmental Laws (as defined below), releases of any material into the environment, actions, activities, circumstances, conditions, events, incidents, or contractual obligations which may give rise to any common law environmental liability or any liability under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or similar federal, state, local or foreign laws and neither the Company nor any of its Subsidiaries has received any notice with respect to any of the foregoing, nor is any action pending or, to the Company's knowledge, threatened in connection with any of the foregoing. The term "Environmental Laws" means all federal, state, local or foreign laws relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "Hazardous Materials") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations issued, entered, promulgated or approved thereunder.

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(ii) Other than those that are or were stored, used or disposed of in compliance with applicable law, no Hazardous Materials are contained on or about any real property currently owned, leased or used by the Company or any of its Subsidiaries, and no Hazardous Materials were released on or about any real property previously owned, leased or used by the Company or any of its Subsidiaries during the period the property was owned, leased or used by the Company or any of its Subsidiaries, except in the normal course of the Company's or any of its Subsidiaries' business.

(iii) There are no underground storage tanks on or under any real property owned, leased or used by the Company or any of its Subsidiaries that are not in compliance with applicable law.

t. Title to Property. Except as disclosed in the SEC Documents the Company and its Subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them which is material to the business of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances and defects or such as would not have a Material Adverse Effect. Any real property and facilities held under lease by the Company and its Subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as would not have a Material Adverse Effect.

u. Internal Accounting Controls. Except as disclosed in the SEC Documents the Company and each of its Subsidiaries maintain a system of internal accounting controls sufficient, in the judgment of the Company's board of directors, to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

v. Foreign Corrupt Practices. Neither the Company, nor any of its Subsidiaries, nor any director, officer, agent, employee or other person acting on behalf of the Company or any Subsidiary has, in the course of his actions for, or on behalf of, the Company, used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended, or made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee.

w. Solvency. The Company (after giving effect to the transactions contemplated by this Agreement) has no information that would lead it to reasonably conclude that the Company would not, after giving effect to the transactions contemplated by this Agreement, have the ability to, nor does it intend to take any action that would impair its ability to, pay its debts from time to time incurred in connection therewith as such debts mature. The Company did not receive a qualified opinion from its auditors with respect to its most recent fiscal year end and, after giving effect to the transactions contemplated by this Agreement, does not anticipate or know of any basis upon which its auditors might issue a qualified opinion in respect of its current fiscal year. For the avoidance of doubt any disclosure of the Borrower's ability to continue as a "going concern" shall not, by itself, be a violation of this Section 3(w).

x. No Investment Company. The Company is not, and upon the issuance and sale of the Securities as contemplated by this Agreement will not be an "investment company" required to be registered under the Investment Company Act of 1940 (an "Investment Company"). The Company is not controlled by an Investment Company.

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y. Insurance. The Company and each of its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be prudent and customary in the businesses in which the Company and its Subsidiaries are engaged. Neither the Company nor any such Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect. Upon written request the Company will provide to each Buyer true and correct copies of all policies relating to directors' and officers' liability coverage, errors and omissions coverage, and commercial general liability coverage.

z. Bad Actor. No officer or director of the Company would be disqualified under Rule 506(d) of the Securities Act as amended on the basis of being a "bad actor" as that term is established in the September 19, 2013 Small Entity Compliance Guide published by the SEC.

aa. Shell Status. The Company represents that it has previously been a "shell" issuer, but at least twelve (12) months have passed since the Company has reported Form 10 type information indicating that it is no longer a "shell" issuer. Further, the Company will instruct its counsel to either (i) write a 144-3(a)(9) opinion to allow for salability of the Conversion Shares or (ii) not unreasonably reject such opinion from a Buyer's counsel.

bb. No-Off Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company or any of its Subsidiaries and an unconsolidated or other off-balance sheet entity that is required to be disclosed by the Company in its 1934 Act filings and is not so disclosed or that otherwise could be reasonably likely to have a Material Adverse Effect.

cc. Manipulation of Price. The Company has not, and to its knowledge no one acting on its behalf has: (i) taken, directly or indirectly, any action designed to cause or to result, or that could reasonably be expected to cause or result, in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any person any compensation for soliciting another to purchase any other securities of the Company.

dd. Sarbanes-Oxley Act. The Company and each Subsidiary is in material compliance with all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and all applicable rules and regulations promulgated by the SEC thereunder that are effective as of the date hereof.

ee. Employee Relations. Neither the Company nor any of its Subsidiaries is a party to any collective bargaining agreement or employs any member of a union. The Company believes that its and its Subsidiaries' relations with their respective employees are good. No executive officer (as defined in Rule 501(f) promulgated under the 1933 Act) or other key employee of the Company or any of its Subsidiaries has notified the Company or any such Subsidiary that such officer intends to leave the Company or any such Subsidiary or otherwise terminate such officer's employment with the Company or any such Subsidiary. To the knowledge of the Company, no

executive officer or other key employee of the Company or any of its Subsidiaries is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement, non-competition agreement, or any other contract or agreement or any restrictive covenant, and the continued employment of each such executive officer or other key employee (as the case may be) does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all federal, state, local and foreign laws and regulations respecting labor, employment and employment practices and benefits, terms and conditions of employment and wages and hours, except where failure to be in compliance would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

ff. Breach of Representations and Warranties by the Company. The Company agrees that if the Company breaches any of the representations or warranties set forth in this Section 3, and in addition to any other remedies available to the Buyers pursuant to this Agreement and it may be considered an Event of Default under Section 3.5 of the Note, the Company shall pay to the Buyers the Standard Liquidated Damages Amount in cash or in shares of Common Stock at the option of the Company, until such breach is cured. If the Company elects to pay the Standard Liquidated Damages Amounts in shares of Common Stock, such shares shall be issued at the Conversion Price at the time of payment.

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#### 4. COVENANTS.

a. Best Efforts. The parties shall use their commercially reasonable best efforts to satisfy timely each of the conditions described in Section 5 and 6 of this Agreement.

b. Form D; Blue Sky Laws. The Company agrees to file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof to each Buyer promptly after such filing. The Company shall, on or before each Closing Date, take such action as the Company shall reasonably determine is necessary to qualify the Securities for sale to the Buyers at the applicable closing pursuant to this Agreement under applicable securities or “blue sky” laws of the states of the United States (or to obtain an exemption from such qualification), and shall provide evidence of any such action so taken to each Buyer on or prior to such Closing Date.

c. Use of Proceeds. The Company shall use the proceeds from the sale of the Notes for working capital and other general corporate purposes and shall not, directly or indirectly, use such proceeds for any loan to or investment in any other corporation, partnership, enterprise or other person (except in connection with its currently existing direct or indirect Subsidiaries).

d. RESERVED.

e. Financial Information. The Company agrees to send or make available the following reports to each Buyer until such Buyer transfers, assigns, or sells all of the Securities: within ten (10) days after the filing with the SEC, a copy of its Annual Report on Form 10-K its Quarterly Reports on Form 10-Q and any Current Reports on Form 8-K; within one (1) day after release, copies of all press releases issued by the Company or any of its Subsidiaries; and contemporaneously with the making available or giving to the shareholders of the Company, copies of any notices or other information the Company makes available or gives to such shareholders. For the avoidance of doubt, filing the documents required in (i) above via EDGAR or releasing any documents set forth in (ii) above via a recognized wire service shall satisfy the delivery requirements of this Section 4(e).

f. Listing. The Company shall promptly secure the listing of the Conversion Shares upon each national securities exchange or automated quotation system, if any, upon which shares of Common Stock are then listed (subject to official notice of issuance) and, so long as any Buyer owns any of the Securities, shall maintain, so long as any other shares of Common Stock shall be so listed, such listing of all Conversion Shares from time to time issuable upon conversion of the Note. The Company will obtain and, so long as any Buyer owns any of the Securities, maintain the listing and trading of its Common Stock on the OTCBB, OTCQB, OTC Pink or any equivalent replacement exchange, the Nasdaq Global Market (“Nasdaq”), the Nasdaq Capital Market (“Nasdaq SmallCap”), the New York Stock Exchange (“NYSE”), the NYSE American or any other securities exchange registered with the SEC as a “national securities exchange” under Section 6 of the 1934 Act (a “National Exchange”) and will comply in all respects with the Company’s reporting, filing and other obligations under the bylaws or rules of the Financial Industry Regulatory Authority (“FINRA”) and such exchanges, as applicable. The Company shall promptly provide to each Buyer copies of any material notices it receives from the OTCBB, OTCQB and any other exchanges or quotation systems on which the Common Stock is then listed regarding the continued eligibility of the Common Stock for listing on such exchanges and quotation systems. The Company shall pay any and all fees and expenses in connection with satisfying its obligation under this Section 4(f).

g. Corporate Existence. So long as any Buyer beneficially owns any Note, the Company shall maintain its corporate existence and shall not sell all or substantially all of the Company’s assets, except in the event of a merger or consolidation or sale of all or substantially all of the Company’s assets, where the surviving or successor entity in such transaction (i) assumes the Company’s obligations hereunder and under the agreements and instruments entered into in connection herewith and (ii) is a publicly traded corporation whose Common Stock is listed for trading on the OTCBB, OTCQB, OTC Pink, Nasdaq, NasdaqCapital, NYSE, NYSE American or any other National Exchange.

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h. No Integration. The Company shall not make any offers or sales of any security (other than the Securities) under circumstances that would require registration of the Securities being offered or sold hereunder under the 1933 Act or cause the offering of the Securities to be integrated with any other offering of securities by the Company for the purpose of any stockholder approval provision applicable to the Company or its securities.

i. Failure to Comply with the 1934 Act. So long as any Buyer beneficially owns any Note, the Company shall comply with the quarterly and annual reporting requirements of the 1934 Act; and the Company shall continue to be subject to the reporting requirements of the 1934 Act.

j. Trading Activities. No Buyer nor its affiliates has an open short position (or other hedging or similar transactions) in the Common Stock of the Company and each Buyer agrees that it shall not, and that it will cause its affiliates not to, engage in any short sales of or hedging transactions with respect to the Common Stock of the Company.

k. RESERVED.

l. Legal Counsel Opinions. Upon the request of a Buyer from time to time, the Company shall be responsible (at the Company’s cost) for promptly (within ten (10) business days from such Buyer’s request) supplying to the Company’s transfer agent and the requesting Buyer a customary legal opinion letter of its counsel (the “Legal Counsel Opinion”) to the effect that the sale of Conversion Shares by such Buyer or its affiliates, successors and assigns is exempt from the registration requirements of the 1933 Act pursuant to Rule 144 (provided the requirements of Rule 144 are satisfied and provided the Conversion Shares are not then registered under the 1933 Act for resale pursuant to an effective registration statement); provided, however, that it is understood that such opinions will generally be provided by counsel selected by the Buyer and which need not be counsel to the Company.

m. Par Value. If the closing bid price at any time a Note is outstanding falls below \$0.001 for five (5) consecutive days, the Company shall use its best efforts to cause the par value of its Common Stock to be reduced to \$0.0001 or less.

n. Breach of Covenants. The Company agrees that if the Company breaches any of the covenants set forth in this Section 4, and in addition to any

other remedies available to the Buyers pursuant to this Agreement, it will be considered an Event of Default under Section 3.4 of the Notes, the Company shall pay to each Buyer the Standard Liquidated Damages Amount in cash or in shares of Common Stock at the option of the Buyer, until such breach is cured, or with respect to Section 4(d) above, the Company shall pay to the Buyer the Standard Liquidated Damages Amount in cash or shares of Common Stock, at the option of the Buyer, upon each violation of such provision. If a Buyer elects to receive the Standard Liquidated Damages Amounts in shares of Common Stock, such shares shall be issued at the Conversion Price at the time of payment.

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**o. Transfer Agent Instructions.** The Company shall issue irrevocable instructions to its transfer agent to issue certificates, registered in the name of each Buyer or its nominee, for the Conversion Shares in such amounts as specified from time to time by such Buyer to the Company upon conversion of the Notes in accordance with the terms thereof (the "Irrevocable Transfer Agent Instructions"). In the event that the Company proposes to replace its transfer agent, the Company shall 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 this 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 Company and the Company. Prior to registration of the Conversion Shares under the 1933 Act or the date on which the Conversion Shares 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, all such certificates shall bear the restrictive legend specified in Section 2(g) of this Agreement. The Company warrants that: (i) no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section, and stop transfer instructions to give effect to Section 2(f) hereof (in the case of the Conversion Shares, prior to registration of the Conversion Shares under the 1933 Act or the date on which the Conversion Shares 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), will be given by the Company to its transfer agent and that the Securities shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement and the Note; (ii) it will not direct its transfer agent not to transfer or delay, impair, and/or hinder its transfer agent in transferring (or issuing) (electronically or in certificated form) any certificate for Conversion Shares to be issued to a Buyer upon conversion of or otherwise pursuant to the Notes as and when required by the Notes and this Agreement; and (iii) it will not fail 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 Conversion Shares issued to a Buyer upon conversion of or otherwise pursuant to the Notes as and when required by the Note and this Agreement. Nothing in this Section shall affect in any way a Buyer's obligations and agreement set forth in Section 2(g) hereof to comply with all applicable prospectus delivery requirements, if any, upon re-sale of the Securities. If a Buyer provides the Company, at the cost of the Company not to exceed \$300, with (i) an opinion of counsel in form, substance and scope customary for opinions in comparable transactions, to the effect that a public sale or transfer of such Securities may be made without registration under the 1933 Act and such sale or transfer is effected or (ii) a Buyer provides reasonable assurances that the Securities can be and are being sold pursuant to Rule 144, the Company shall permit the transfer, and, in the case of the Conversion Shares, promptly instruct its transfer agent to issue one or more certificates, free from restrictive legend, in such name and in such denominations as specified by such Buyer. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Buyers, by vitiating the intent and purpose of the transactions contemplated hereby. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section may be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section, that each Buyer shall be entitled, in addition to all other available remedies, to an injunction restraining any breach and requiring immediate transfer, without the necessity of showing economic loss and without any bond or other security being required.

**p. Original Issue Discount.** For the avoidance of doubt, there shall be an aggregate three hundred seventy thousand No/100 United States Dollars (US\$370,000) 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 two million two hundred twenty thousand and No/100 United States Dollars (US\$2,220,000).

**q. Additional Expenses.** In addition to the Transaction Expense Amounts, the Company shall reimburse Buyers for any and all reasonable expenses incurred by them in connection with the performance of the Transaction Documents, including, without limitation, reasonable attorneys' and consultants' fees and expenses, transfer agent fees, fees for stock quotation services, fees relating to any amendments or modifications of the Transaction Documents or any consents or waivers of provisions in the Transaction Documents, fees for the preparation of opinions of counsel, and costs of restructuring the transactions contemplated by the Transaction Documents. When possible, the Company must pay these fees directly, including, but not limited to, any and all wire fees, otherwise the Company must make immediate payment for reimbursement to each Buyer for all fees and expenses immediately upon written notice by such Buyer or the submission of an invoice by such Buyer.

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r. RESERVED.

s. RESERVED.

**t. Registration Rights.** The Company shall file a registration statement in respect of the Conversion Shares in accordance with the Registration Rights Agreement. Following the date hereof the Company shall not file any registration statement in respect to its Common Stock until the thirty days following the date that the registration statement filed pursuant to the terms of the Registration Statement has been declared effective by the SEC other than in respect to the offering (the "Uplist Transaction") conducted in conjunction with the listing (the "Uplist") of the Common Stock on a National Exchange.

**5. CONDITIONS PRECEDENT TO THE COMPANY'S OBLIGATIONS TO SELL.** The obligation of the Company hereunder to issue and sell a Note to a Buyer at a Closing is subject to the satisfaction, at or before each Closing Date of each of the following conditions thereto, provided that these conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion:

a. Such Buyer shall have executed this Agreement and delivered the same to the Company.

b. Such Buyer shall have delivered its respective portion of the Purchase Price or surrendered their Advances in accordance with Section 1(b) above.

c. The representations and warranties of such Buyer shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date), and such Buyer shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by such Buyer at or prior to the Closing Date.

d. No litigation, statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by or in any court or governmental authority of competent jurisdiction or any self-regulatory organization having authority over the matters contemplated hereby which prohibits the consummation of any of the transactions contemplated by this Agreement.

#### **6. CONDITIONS PRECEDENT TO THE BUYER'S OBLIGATION TO PURCHASE.**

a. The obligation of each Buyer hereunder to purchase a First Note at the First Closing is subject to the satisfaction, at or before the First Closing Date of each of the following conditions, provided that these conditions are for each Buyer's sole benefit and may be waived by a Buyer at any time in its sole discretion:

(i) The Company shall have executed one or more copies of this Agreement and delivered the same to each Buyer.

(ii) The Board of Directors of the Company shall have approved by Unanimous Written Consent (the "Consent") the Issuance and

transactions contemplated by this Agreement and the Notes and the Company shall have delivered a copy of such fully executed Consent to each Buyer.

(iii) The Company shall have delivered to each Buyer its respective duly executed Note (in such denominations as such Buyer shall request) and in accordance with Section 1(b) above.

(iv) The Company and each Subsidiary shall have delivered to the Buyers a duly executed copy of the Security Agreement, including all exhibits and schedules thereto.

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(v) Each Subsidiary shall have delivered to the Buyers a duly executed copy of the Guaranty.

(vi) The Company shall have delivered to the Buyers a duly executed copy of the Registration Rights Agreement.

(vii) RESERVED.

(viii) RESERVED.

(ix) The Irrevocable Transfer Agent Instructions, in form and substance satisfactory to the Buyers that are majority-in-interest holders of the outstanding Notes, shall have been delivered to and acknowledged in writing by the Company's Transfer Agent and a copy of such fully executed Irrevocable Transfer Agent Instructions shall have been delivered to each Buyer.

(x) The representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the First Closing Date as though made at such time (except for representations and warranties that speak as of a specific date) and the Company shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the First Closing Date. Each Buyer shall have received a certificate or certificates, executed by the chief executive officer of the Company, dated as of the First Closing Date, to the foregoing effect and as to such other matters as may be reasonably requested by such Buyer including, but not limited to certificates with respect to the Company's Certificate of Incorporation, By-laws and Board of Directors' resolutions relating to the transactions contemplated hereby.

(xi) No litigation, statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by or in any court or governmental authority of competent jurisdiction or any self-regulatory organization having authority over the matters contemplated hereby which prohibits the consummation of any of the transactions contemplated by this Agreement.

(xii) No event shall have occurred which could reasonably be expected to have a Material Adverse Effect on the Company including but not limited to a change in the 1934 Act reporting status of the Company or the failure of the Company to be timely in its 1934 Act reporting obligations.

(xiii) Trading in the Common Stock on the OTCBB, OTCQB or any similar quotation system shall not have been suspended by the SEC or the OTCBB, OTCQB, OTC Pink or any similar quotation system.

(xiv) Each Buyer shall have received an officer's certificate described in Section 3(c) above, dated as of the First Closing Date.

b. The obligation of each Buyer hereunder to purchase Additional Notes at any Additional Closing is subject to the satisfaction, at or before applicable Additional Closing Date of each of the following conditions, provided that these conditions are for such Buyer's sole benefit and may be waived by a Buyer at any time in its sole discretion:

(i) The Buyers shall have executed the Transaction Documents applicable to the Additional Closing and delivered copies of the same to each Buyer.

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(ii) The representations and warranties of the Company shall be true and correct in all material respects (except to the extent that any of such representations and warranties are already qualified as to materiality in Section 2 above, in which case, such representations and warranties shall be true and correct in all respects without further qualification) as of the date when made and as of the Additional Closing Date as though made at that time (except for representations and warranties that speak as of a specific date) and the Company shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Additional Closing Date.

(iii) No event shall have occurred which could reasonably be expected to have a Material Adverse Effect.

(iv) No default or Event of Default shall have occurred and be continuing under this Agreement or any other Transaction Documents, and no event shall have occurred that, with the passage of time, the giving of notice, or both, would constitute a default or an Event of Default under this Agreement or any other Transaction Documents.

(v) The Company shall have executed such other agreements, certificates, confirmations or resolutions as each Buyer may require to consummate the transactions contemplated by this Agreement and the Transaction Documents.

## 7. GOVERNING LAW; MISCELLANEOUS.

a. Governing Law; Arbitration; Attorneys' Fees. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal Laws of the State of Nevada, without regard to the principles of conflicts of law thereof. Any disputes, claims, or controversies arising out of or relating to the Transaction Documents, or the transactions, contemplated thereby, or the breach, termination, enforcement, interpretation or validity thereof, including the determination of the scope or applicability of this Agreement to arbitrate, shall be referred to and resolved solely and exclusively by binding arbitration to be conducted before the Judicial Arbitration and Mediation Service ("JAMS"), or its successor pursuant to the expedited procedures set forth in the JAMS Comprehensive Arbitration Rules and Procedures (the "Rules"), including Rules 16.1 and 16.2 of those Rules. The arbitration shall be held in New York, New York, before a tribunal consisting of three arbitrators each of whom will be selected in accordance with the "strike and rank" methodology set forth in Rule 15. Either party to this Agreement may, without waiving any remedy under this Agreement, seek from any federal or state court sitting in the State of New York any interim or provisional relief that is necessary to protect the rights or property of that party, pending the establishment of the arbitral tribunal. The costs and expenses of such arbitration shall be paid by and be the sole responsibility of the Company, including but not limited to each Buyer's attorneys' fees and each arbitrator's fees. The arbitrators' decision must set forth a reasoned basis for any award of damages or finding of liability. The arbitrators' decision and award will be made and delivered as soon as reasonably possibly and in any case within 60 days' following the conclusion of the arbitration hearing and shall be final and binding on the parties and may be entered by any court having jurisdiction thereof. If any party shall commence an Action to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company elsewhere in this Agreement, the prevailing party in such Action shall be reimbursed by the non-prevailing party for its reasonable attorneys' fees and other costs and expenses

incurred with the investigation, preparation and prosecution of such Action.

b. Counterparts; Signatures by Facsimile. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party. This Agreement, once executed by a party, may be delivered to the other party hereto by facsimile transmission of a copy of this Agreement bearing the signature of the party so delivering this Agreement.

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c. Construction; Headings. This Agreement shall be deemed to be jointly drafted by the Company and the Buyers and shall not be construed against any person as the drafter hereof. The headings of this Agreement are for convenience of reference only and shall not form part of, or affect the interpretation of, this Agreement.

d. Severability. In the event that any provision of this Agreement 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.

e. Entire Agreement; Amendments; Waivers. This Agreement, the Notes and the instruments referenced herein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor the Buyers makes any representation, warranty, covenant or undertaking with respect to such matters. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and Buyers which purchased at least 50.0% plus \$1.00, of the Notes based on the initial Principal Amounts hereunder or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought, provided that if any amendment, modification or waiver disproportionately and adversely impacts a Buyer (or group of Buyer), the consent of such disproportionately impacted Buyer (or group of Buyers) shall also be required. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition, or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right. Any proposed amendment or waiver that disproportionately, materially, and adversely affects the rights and obligations of any Buyer relative to the comparable rights and obligations of the other Buyers shall require the prior written consent of such adversely affected Buyer. Any amendment effected in accordance with this Section 7(e) shall be binding upon each Buyer and holder of Securities and the Company.

f. 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, telegram, email, 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 email 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 Company, to:

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

If to a Buyer, to the address set forth on its respective signature page hereto.

Each party shall provide notice to the other party of any change in address.

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g. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and assigns. Neither the Company nor the any Buyer shall assign this Agreement or any rights or obligations hereunder without the prior written consent of the other. Notwithstanding the foregoing, subject to Section 2(f), a Buyer may assign its rights hereunder to any person that purchases Securities in a private transaction from such Buyer or to any of its "affiliates," as that term is defined under the 1934 Act, without the consent of the Company.

h. Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

i. Survival. The representations and warranties of the Company and the agreements and covenants set forth in this Agreement shall survive the closing hereunder notwithstanding any due diligence investigation conducted by or on behalf of the Buyers. The Company agrees to indemnify and hold harmless each Buyer and all their officers, directors, employees and agents for loss or damage arising as a result of or related to any breach or alleged breach by the Company of any of its representations, warranties and covenants set forth in this Agreement or any of its covenants and obligations under this Agreement, including advancement of expenses as they are incurred.

j. Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

k. No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

l. Remedies. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Buyers by vitiating the intent and purpose of the transaction contemplated hereby. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Agreement will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Agreement, that each Buyer 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 Agreement and to enforce specifically the terms and provisions hereof, without the necessity of showing economic loss and without any bond or other security being required.

m. Publicity. The Company, and each Buyer shall have the right to review a reasonable period of time before issuance of any press releases, SEC, OTCQB or FINRA filings, or any other public statements with respect to the transactions contemplated hereby; provided, however, that the Company shall be entitled, without

the prior approval of the Buyer, to make any press release or SEC, OTCQB (or other applicable trading market) or FINRA filings with respect to such transactions as is required by applicable law and regulations (although the Buyer shall be consulted by the Company in connection with any such press release prior to its release and shall be provided with a copy thereof and be given an opportunity to comment thereon).

n. Indemnification. In consideration of each Buyer's execution and delivery of this Agreement and acquiring the Securities hereunder, and in addition to all of the Company's other obligations under this Agreement or the Notes, the Company shall defend, protect, indemnify and hold harmless each Buyer and its stockholders, partners, members, officers, directors, employees and direct or indirect investors and any of the foregoing persons' agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "Indemnitees") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "Indemnified Liabilities"), incurred by any Indemnitee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in this Agreement or the Notes or any other agreement, certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in this Agreement or the Notes or any other agreement, certificate, instrument or document contemplated hereby or thereby or (c) any cause of action, suit or claim brought or made against such Indemnitee by a third party (including for these purposes a derivative action brought on behalf of the Company) and arising out of or resulting from (i) the execution, delivery, performance or enforcement of this Agreement or the Notes or any other agreement, certificate, instrument or document contemplated hereby or thereby, (ii) any transaction financed or to be financed in whole or in part, directly or indirectly, with the proceeds of the issuance of the Securities, or (iii) the status of the Buyers or holder of the Securities as an investor in the Company pursuant to the transactions contemplated by this Agreement. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities that is permissible under applicable law.

[signature page follows]

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IN WITNESS WHEREOF, the undersigned have caused this Agreement to be duly executed as of the date first above written.

**ARCH THERAPEUTICS, INC.**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK  
SIGNATURE PAGE(S) FOR BUYER(S) FOLLOW]

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BUYER SIGNATURE PAGES TO SECURITIES PURCHASE AGREEMENT

IN WITNESS WHEREOF, the undersigned have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the Execution Date.

Name of Buyer: [ ]  
[ ]  
Signature of Authorized Signatory of Buyer: \_\_\_\_\_  
Name of Authorized Signatory: \_\_\_\_\_  
Title of Authorized Signatory: \_\_\_\_\_  
Subscription Amount/Principal Amount of Notes: \$[ ]  
Purchase Price of Notes (in cash): \$[ ]  
Aggregate Amount Owning in respect of Advances being Exchanged: \$[ ]

BUYER SIGNATURE PAGES TO SECURITIES PURCHASE AGREEMENT

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**SCHEDULE OF BUYERS**

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**Exhibit A**  
Form of Note

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**Exhibit B**  
Form of Security Agreement

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**Exhibit C**  
Form of Guaranty

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**Exhibit D**  
Form of Registration Rights Agreement

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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\$[ ]  
Purchase Price: US\$[ ]

Issue Date: May \_\_, 2024

### SENIOR SECURED 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 June 30, 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 the date hereof, 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 \$0.50. 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. The Borrower is required at all times to have authorized and reserved one 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"). 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. 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.

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(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 quantify. Accordingly, the parties acknowledge that the liquidated damages provision contained in this Section 1.4(h) are justified.

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(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.

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#### 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 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.

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(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, provided that an Event of Default has not occurred under this Note, the Borrower may prepay the amounts outstanding hereunder.

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. 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. 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.

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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)(10) of the Securities Act (a "3(a)(10) Transaction"). In the event that the Borrower does enter into, or makes any issuance of Common Stock related to a 3(a)(10) 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 Events Upon Uplist. While any portion of this Note is outstanding, in the event of the listing (the "Uplist") of the Common Stock on any securities exchange registered with the U.S. Securities and Exchange Commission (the "Commission") as a "national securities exchange" under Section 6 of the Exchange Act (a "National Exchange"), simultaneously upon the closing of the offering conducted in conjunction with the Uplist, (such offering, the "Uplist Transaction"), one hundred percent

(100%) of the then outstanding Principal Amount of this Note shall automatically convert (the “Automatic Conversion”) into shares of Common Stock, with the Conversion Price for purposes of such Automatic Conversion being equal to \$0.515625 (subject to adjustment for stock splits and similar transactions occurring after the date of the execution of this Amendment) per share. Furthermore, the Borrower shall give the Holder at least five business days prior notice identifying the date of closing of the Uplist Transaction. Notwithstanding the foregoing, if the Holder owns more than one Convertible Note, unless it elects otherwise by notice to the Borrower prior the Automatic Conversion, the aggregate amount to be converted in the Automatic Conversion for all such Convertible Notes of the Holder combined will be allocated among such Convertible Notes in inverse order of when they were issued (such that the most recently issued Convertible Note is converted in full before any portion of the next-most-recently issued Convertible Note is converted, and so on until such aggregate amount to be converted has been converted).

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In addition, upon the Automatic Conversion, the Holder shall receive a warrant (the “Uplist Conversion Warrant”) to purchase a number of shares of Common Stock equal to the number of shares of Common Stock (or shares of Common Stock underlying Note Conversion Pre-Funded Warrants (as defined below), if any) issued upon the Automatic Conversion. The Uplist Conversion Warrant shall have an exercise price equal to \$0.50 (subject to adjustment for stock splits and similar transactions occurring after the date of the execution of this Amendment) per share and shall otherwise be identical to the warrants (other than pre-funded warrants) issued pursuant to the Securities Purchase Agreement dated as of November 8, 2023, as amended (the “Uplist PIPE SPA”). Upon the issuance of the Uplist Conversion Warrant to the Holder, all interest payable under this Note shall be forgiven and cancelled, and no other interest shall be due or payable hereunder. The Company shall file, no later than sixty (60) days after the closing of the Uplist Transaction, a registration statement on Form S-4, or other appropriate form, registering the offer by the Company to exchange (and the Company shall in turn offer to exchange), on a one-for-one basis, all outstanding Uplist Conversion Warrants and Other Warrants (as defined below) for newly issued warrants identical to the warrants that will be sold in the Uplist Transaction accompanying the shares of Common Stock (or share equivalents) being sold in the Uplist Transaction (except that the exercise price shall remain the same as the exercise price specified above), which warrants are expected to be listed on a National Exchange under the symbol “ARTHW.” As used herein, “Other Warrants” means and includes: (x) all warrants issued pursuant to the Securities Purchase Agreement; (y) all warrants (other than pre-funded warrants) issued pursuant to the Uplist PIPE SPA; and (z) the Exchange Warrants (as defined in the Securities Purchase Agreement, dated as of July 7, 2023, as amended, by and among the Company and the buyers signatory thereto). Such registration statement and exchange offer shall allow each holder of a Uplist Conversion Warrant or Other Warrant to participate in such exchange and receive, no later than the earlier of (a) 60th calendar day following the date of the registration statement filing and (b) the fifth trading day following the date on which the Company is notified by the Commission that the registration statement will not be reviewed or is no longer subject to further review and comments, the new warrants in exchange as provided above, and such new warrants shall immediately be tradable on a National Exchange and the underlying shares issuable upon exercise of such warrants shall from and after such time be registered and fully tradable in each case to the same extent as the shares of Common Stock sold in the Uplist Transaction (and required current prospectuses shall be provided). Failure of the Borrower to comply with this provision, including the obligations in any of the previous three sentences, shall constitute an Event of Default.

Upon the Automatic Conversion, a Holder shall receive pre-funded warrants (the “Note Conversion Pre-Funded Warrants”) in lieu of shares of Common Stock otherwise issuable to the Holder to the extent that 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 Automatic Conversion with respect to which the determination of this sentence is being made, would result in beneficial ownership by the Holder and its affiliates of more than 4.99% (or 9.99% if elected in writing by the Holder prior to the date of the execution of this Amendment) of the outstanding shares of Common Stock. For purposes of the immediately preceding sentence, beneficial ownership shall be determined in accordance with Section 13(d) of the Exchange Act, and Regulations 13D-G thereunder, provided, that the limit 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 Note Conversion Pre-Funded Warrants shall have a nominal exercise price of \$0.000125 per share (subject to adjustment for stock splits and similar transactions occurring after the date of the execution of this Amendment), may be exercised on a cashless basis, shall be exercisable immediately upon issuance, shall contain a customary beneficial ownership limitation provision and shall otherwise be identical to the pre-funded warrants issued pursuant to the Uplist PIPE SPA.

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### 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 a 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 and any collateral documents including but not limited to 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.

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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 a National 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 Commission 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 a National Exchange, and such cessation of trading shall continue for a period of seven consecutive (7) Trading Days.

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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 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 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 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 30, 2024.

3.24 Section 3(a)(10) Transaction. The Borrower shall enter into a 3(a)(10) 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 Note plus (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 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 Registration Rights Agreement) and (ii) the date is 15 days following such Event of Default.

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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 7I 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.

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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 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 senior secured convertible note of the Borrower dated as of May \_\_, 2024 (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:

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## REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this “**Agreement**”) is made and entered into as of May \_\_, 2024, between Arch Therapeutics, Inc., a Nevada Corporation (the “**Company**”), and each of the several purchasers signatory hereto (each such purchaser, a “**Purchaser**” and, collectively, the “**Purchasers**”).

This Agreement is made pursuant to the Securities Purchase Agreement, dated as of May \_\_, 2024 between the Company and each Purchaser (the “**Purchase Agreement**”).

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 York 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, with respect to the Initial Registration Statement required to be filed hereunder, the 60th calendar day following the date of its filing; and 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 earlier of (A) the date that is 30 days following the Uplist Transaction, and (B) June 15, 2024; and (ii) 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 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; and (b) 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).

“**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) 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.

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“**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.

“**Securities Act**” means the Securities Act of 1933, as amended.

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

“**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 an offering conducted in conjunction with the listing of the Common Stock on any securities exchange registered with the Commission as a “national securities exchange” under Section 6 of the Exchange Act (a “**National Exchange**”).

## **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 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 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 the date of this Agreement (the “**First Closing Effectiveness Period**” or 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**.

(ii) As used herein, “**Uplist S-1**” means the registration statement on Form S-1 pursuant to which the public offering of Common Stock is made that results in the Uplist Transaction. Notwithstanding anything contained herein to the contrary, the Company shall include in the Uplist S-1 all of the Registrable Securities that have not yet been registered by a Registration Statement as of the time the Uplist S-1 is declared effective under the Securities Act. Further, for the avoidance of doubt, the Uplist S-1 shall be considered a Registration Statement for purposes of this Agreement.

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(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 (b) 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 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.

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**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.

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(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.

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#### 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 (4<sup>th</sup>) **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.

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#### 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**.

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(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 such **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**.

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## **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.

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(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.

(l) 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.

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*(Signature Pages Follow)*

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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]*

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[SIGNATURE PAGE OF HOLDERS]

Name of **Holder**: \_\_\_\_\_

Signature of Authorized Signatory of **Holder**: \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

*[Signature Pages Continue]*

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[SIGNATURE PAGE OF HOLDERS]

Name of **Holder**:

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*Signature of Authorized Signatory of **Holder**:*

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Name of Authorized Signatory:

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Title of Authorized Signatory:

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**SECURITY AGREEMENT**

THIS SECURITY AGREEMENT (as amended, restated, supplemented or otherwise modified from time to time, this "Agreement") dated as of May \_\_, 2024 between Arch Therapeutics, Inc., a Nevada corporation (the "Company"), Arch Biosurgery, Inc., a Massachusetts corporation (together with each other Person who becomes a party to this Agreement by execution of a joinder in the form of Exhibit A attached hereto, which shall include all wholly-owned or majority-owned subsidiaries of the Company acquired after the date hereof for so long as this Agreement remains in effect, are hereinafter sometimes referred to individually as a "Debtor" and, collectively, as the "Debtors") and [ ] in its capacity as Collateral Agent for the benefit of itself and each of the Purchasers (as hereinafter defined) (each, together with its respective successors and assigns, a "Secured Party," and collectively the "Secured Parties").

**WITNESSETH:**

WHEREAS, the Purchasers as from time to time parties to the Purchase Agreement (as hereafter defined) (each a "Purchaser", and together with their successors and assigns and each other purchaser of a Note (as defined below) and their respective successors and assigns, individually and collectively, the "Purchasers"), pursuant to which such Purchasers will purchase from the Company certain senior secured convertible notes each made by the Company and dated as of the date hereof in an original aggregate principal amount of at least \$2,220,000 (all such notes, together with any promissory notes or other securities issued in exchange or substitution therefor or replacement thereof, and as any of the same may be amended, supplemented, restated or modified and in effect from time to time, the "Notes");

AND WHEREAS, the Notes are being acquired by Purchasers, and Purchasers have made certain financial accommodations to the Company pursuant to that certain Securities Purchase Agreement, dated as of the date hereof among the Company, and the Purchasers (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "Purchase Agreement"). Capitalized terms used herein but not otherwise defined shall have the meanings set forth in the Purchase Agreement;

AND WHEREAS, each Debtor will derive substantial benefit and advantage from the financial accommodations to the Company set forth in the Purchase Agreement and the Notes, and it will be to each such Debtor's direct interest and economic benefit to assist the Company in procuring said financial accommodations from Purchasers;

AND WHEREAS, to induce Purchasers to enter into the Purchase Agreement and purchase the Notes, each Debtor will pledge and grant a security interest in all of its right, title and interest in and to the Collateral (as hereinafter defined) as security for its Obligations for the benefit of the Secured Party, Purchasers and their respective successors and assigns.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

Section 1. Definitions. Capitalized terms used herein without definition and defined in the Purchase Agreement are used herein as defined therein. In addition, as used herein:

"Accounts" means any "account," as such term is defined in the UCC, and, in any event, shall include, without limitation, "supporting obligations" as defined in the UCC.

"Chattel Paper" means any "chattel paper," as such term is defined in the UCC.

"Collateral" shall have the meaning ascribed thereto in Section 3 hereof.

"Commercial Tort Claims" means "commercial tort claims", as such term is defined in the UCC.

"Contracts" means all contracts, undertakings, or other agreements (other than rights evidenced by Chattel Paper, Documents or Instruments) in or under which a Debtor may now or hereafter have any right, title or interest, including, without limitation, with respect to an Account, any agreement relating to the terms of payment or the terms of performance thereof.

"Copyrights" means any copyrights, rights and interests in copyrights, works protectable by copyrights, copyright registrations and copyright applications, including, without limitation, the copyright registrations and applications listed on Schedule III attached hereto (if any), and all renewals of any of the foregoing, all income, royalties, damages and payments now and hereafter due and/or payable under or with respect to any of the foregoing, including, without limitation, damages and payments for past, present and future infringements of any of the foregoing and the right to sue for past, present and future infringements of any of the foregoing.

"Deposit Accounts" means all "deposit accounts" as such term is defined in the UCC, now or hereafter held in the name of a Debtor.

"Documents" means any "documents," as such term is defined in the UCC, and shall include, without limitation, all documents of title (as defined in the UCC), bills of lading or other receipts evidencing or representing Inventory or Equipment.

"Equipment" means any "equipment," as such term is defined in the UCC and, in any event, shall include, Motor Vehicles.

"Event of Default" shall have the meaning set forth in the Notes.

"Excluded Assets" means each of the following: (1) any lease, license or other agreement or any property subject to a capital lease, purchase money security interest or similar arrangement, to the extent that a grant of a Lien thereon in favor of Secured Party would violate or invalidate such lease, license, agreement or capital lease, purchase money security interest or similar arrangement or create a right of termination in favor of any other party thereto (other than the Debtors), so long as such provision exists and so long as such lease, license or agreement was not entered into in contemplation of circumventing the obligation to provide Collateral hereunder or in violation of the Purchase Agreement, other than to the extent that any such term would be rendered ineffective pursuant to Sections 9-406, 9-407, 9-408 or 9-409 of the UCC (or any successor provision or provisions) of any relevant jurisdiction or any other applicable law including the bankruptcy code, or principles of equity.

"General Intangibles" means any "general intangibles," as such term is defined in the UCC, and, in any event, shall include, without limitation, all right, title and interest in or under any Contract, models, drawings, materials and records, claims, literary rights, goodwill, rights of performance, Copyrights, Trademarks, Patents, warranties, rights under insurance policies and rights of indemnification.

"Goods" means any "goods", as such term is defined in the UCC, including, without limitation, fixtures and embedded Software to the extent included in "goods" as defined in the UCC.

"Governmental Authority" means the government of the United States of America or any other nation, or any political subdivision thereof, whether state or local, or any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administration powers or functions of or pertaining to government over any Debtor or any of its subsidiaries, or any of their respective properties, assets or undertakings.

"Instruments" means any "instrument," as such term is defined in the UCC, and shall include, without limitation, promissory notes, drafts, bills of exchange, trade acceptances, letters of credit, letter of credit rights (as defined in the UCC), and Chattel Paper.

"Inventory" means any "inventory," as such term is defined in the UCC.

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"Investment Property" means any "investment property", as such term is defined in the UCC.

"Obligations" means all obligations, liabilities and indebtedness of every nature of Debtors from time to time owed or owing under or in respect of this Agreement, the Notes, and any of the other Security Documents, as the case may be, including, without limitation, the principal amount of all debts, claims and indebtedness, accrued and unpaid interest and all fees, costs and expenses, whether primary, secondary, direct, contingent, fixed or otherwise, heretofore, now and/or from time to time hereafter owing, due or payable whether before or after the filing of a bankruptcy, insolvency or similar proceeding under applicable federal, state, foreign or other law and whether or not an allowed claim in any such proceeding.

"Lien" means a lien, charge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

"Motor Vehicles" shall mean motor vehicles, tractors, trailers and other like property, whether or not the title thereto is governed by a certificate of title or ownership.

"Patents" means any patents, pending patents and patent applications, including, without limitation, the inventions and improvements described and claimed therein, all patentable inventions and those patents and patent applications listed on Schedule IV attached hereto (if any), and the reissues, divisions, continuations, renewals, extensions and continuations-in-part of any of the foregoing, and all income, royalties, damages and payments now or hereafter due and/or payable under or with respect to any of the foregoing, including, without limitation, damages and payments for past, present and future infringements of any of the foregoing and the right to sue for past, present and future infringements of any of the foregoing.

"Permitted Indebtedness" has the meaning set forth in the Notes.

"Permitted Lien" means the individual and collective reference to the following: (a) Liens for taxes, assessments and other governmental charges or levies not yet due or Liens for taxes, assessments and other governmental charges or levies being contested in good faith and by appropriate proceedings for which adequate reserves (in the good faith judgment of the management of the Company) have been established in accordance with GAAP, and (b) Liens imposed by law which were incurred in the ordinary course of the Company's business, such as carriers', warehousemen's and mechanics' Liens, statutory landlords' Liens, and other similar Liens arising in the ordinary course of the Company's business, and which (x) do not individually or in the aggregate materially detract from the value of such property or assets or materially impair the use thereof in the operation of the business of the Company and its consolidated Subsidiaries or (y) are being contested in good faith by appropriate proceedings, which proceedings have the effect of preventing for the foreseeable future the forfeiture or sale of the property or asset subject to such Lien.

"Pledged Collateral" means all Instruments and Investment Property whether or not physically delivered to the Collateral Agent according to this Agreement.

"Proceeds" means "proceeds," as such term is defined in the UCC and, in any event, includes, without limitation, (a) any and all proceeds of any insurance, indemnity, warranty or guaranty payable with respect to any of the Collateral, (b) any and all payments (in any form whatsoever) made or due and payable from time to time in connection with any requisition, confiscation, condemnation, seizure or forfeiture of all or any part of the Collateral by any Governmental Authority (or any person acting under color of Governmental Authority), and (c) any and all other amounts from time to time paid or payable under, in respect of or in connection with any of the Collateral.

"Representative" means any Person acting as agent, representative or trustee on behalf of the Secured Party from time to time.

"Security Documents" means this Agreement, and any other documents securing the Liens of the Secured Party hereunder.

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"Software" means all "software" as such term is defined in the UCC, now owned or hereafter acquired by a Debtor, other than software embedded in any category of Goods, including, without limitation, all computer programs and all supporting information provided in connection with a transaction related to any program.

"Trademarks" means any trademarks, trade names, corporate names, company names, business names, fictitious business names, trade styles, service marks, logos, other business identifiers, prints and labels on which any of the foregoing have appeared or appear, all registrations and recordings thereof, and all applications in connection therewith, including, without limitation, the trademarks and applications listed in Schedule V attached hereto (if any) and renewals thereof, and all income, royalties, damages and payments now or hereafter due and/or payable under or with respect to any of the foregoing, including, without limitation, damages and payments for past, present and future infringements of any of the foregoing and the right to sue for past, present and future infringements of any of the foregoing.

"Transaction Documents" means the Purchase Agreement, the Notes, the Security Documents, the Warrants and any other related agreements.

"UCC" shall mean the Uniform Commercial Code as in effect from time to time in the State of Nevada; provided, that to the extent that the Uniform Commercial Code is used to define any term herein and such term is defined differently in different Articles or Divisions of the Uniform Commercial Code, the definition of such term contained in Article or Division 9 shall govern.

Section 2. Representations, Warranties and Covenants of Debtors. Each Debtor represents and warrants to, and covenants with, the Secured Party as follows:

(a) Subject to the Permitted Liens, such Debtor has or will have rights in and the power to transfer the Collateral in which it purports to grant a security interest pursuant to Section 3 hereof (subject, with respect to after acquired Collateral, to such Debtor acquiring the same) and no Lien other than Permitted Liens exists or will exist upon such Collateral at any time.

(b) Subject to the Permitted Liens, this Agreement is effective to create in favor of Secured Party a valid security interest in and Lien upon all of such Debtor's right, title and interest in and to the Collateral, and upon (i) the filing of appropriate UCC financing statements in the jurisdictions listed on Schedule I attached hereto, (ii) creation of each Deposit Account, (iii) filings in the United States Patent and Trademark Office, or United States Copyright Office with respect to Collateral that constitutes Patents and Trademarks, or Copyrights, as the case may be, (iv) the filing of the Mortgages in the jurisdictions listed on Schedule I hereto, (v) the delivery to the Secured Party of the Pledged Collateral together with assignments in blank, (vi) the security interest created hereby being noted on each certificate of title evidencing the ownership of any Motor Vehicle in accordance with Section 4.1(d) hereof and (v) delivery to the Secured Party or its Representative of Instruments duly endorsed by such Debtor or accompanied by appropriate instruments of transfer duly executed by such Debtor with respect to Instruments not constituting Chattel Paper, such security interest will be a duly perfected first priority perfected security interest (subject to Permitted Liens) in all of the Collateral. Each Debtor shall, upon request from the Secured Party, enter into a Deposit Account Control Agreement, the form and substance of which shall be mutually agreed upon by the parties in good faith.

(c) All of the Equipment, Inventory and Goods owned by such Debtor is located at the places as specified on Schedule I attached hereto. Except as disclosed on Schedule I, none of the Collateral is in the possession of any bailee, warehousemen, processor or consignee. Schedule I discloses such Debtor's name as of the date hereof as it appears in official filings in the state or province, as applicable, of its incorporation, formation or organization, the type of entity of such Debtor (including corporation, partnership, limited partnership or limited liability company), organizational identification number issued by such Debtor's state of incorporation, formation or organization (or a statement that no such number has been issued), such Debtor's state or province, as applicable, of incorporation, formation or organization and the chief place of business, chief executive office and the office where such Debtor keeps its books and records and the states in which such Debtor conducts its business. Such Debtor has only one state or province, as applicable, of incorporation, formation or organization. Such Debtor does not do business and has not done business during the past five years under any trade name or fictitious business name except as disclosed on Schedule II attached hereto.

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(d) No Copyrights, Patents or Trademarks listed on Schedules III, IV and V, respectively, if any, have been adjudged invalid or unenforceable or have been canceled, in whole or in part, or are not presently subsisting. Each of such Copyrights, Patents and Trademarks (if any) is valid and enforceable. Subject to the Permitted Liens, such Debtor is the sole and exclusive owner of the entire and unencumbered right, title and interest in and to each of such Copyrights, Patents and Trademarks, identified on Schedules III, IV and V, as applicable, as being owned by such Debtor, free and clear of any liens (subject to the Permitted Lien), charges and encumbrances, including without limitation licenses, shop rights and covenants by such Debtor not to sue third persons. Such Debtor has adopted, used and is currently using, or has a current bona fide intention to use, all of such Trademarks and Copyrights. Such Debtor has no notice of any suits or actions commenced or threatened with reference to the Copyrights, Patents or Trademarks owned by it.

(e) Each Debtor agrees to deliver to the Secured Party an updated Schedule I, II, III, IV and/or V within five Business Days of any change thereto.

(f) All depository and other accounts including, without limitation, Deposit Accounts, securities accounts, brokerage accounts and other similar accounts, maintained by each Debtor are described on Schedule VI hereto, which description includes for each such account the name of the Debtor maintaining such account, the name, address and telephone and telecopy numbers of the financial institution at which such account is maintained, the account number and the account officer, if any, of such account. No Debtor shall open any new Deposit Accounts, securities accounts, brokerage accounts or other accounts unless such Debtor shall have given Secured Party 10 Business Days' prior written notice of its intention to open any such new accounts. Each Debtor shall deliver to Secured Party a revised version of Schedule VI showing any changes thereto within five Business Days of any such change. Each Debtor hereby authorizes the financial institutions at which such Debtor maintains an account to provide Secured Party with such information with respect to such account as Secured Party from time to time reasonably may request, and each Debtor hereby consents to such information being provided to Secured Party. In addition, all of such Debtor's depository, security, brokerage and other accounts including, without limitation, Deposit Accounts shall be subject to the provisions of Section 2 hereof.

(g) Such Debtor does not own any Commercial Tort Claim except for those disclosed on Schedule VII hereto (if any).

(h) Such Debtor does not have any interest in real property with respect to real property except as disclosed on Schedule VIII (if any). Each Debtor shall deliver to Secured Party a revised version of Schedule VIII showing any changes thereto within 10 Business Days of any such change. Except as otherwise agreed to by Secured Party, all such interests in real property with respect to such real property are subject to a mortgage and deed of trust (in form and substance satisfactory to Secured Party) in favor of Secured Party (hereinafter, a "Mortgage").

(i) Each Debtor shall duly and properly record each interest in real property held by such Debtor, except with respect to easements, rights of way, access agreements, surface damage agreements, surface use agreements or similar agreements that such Debtor, using prudent customs and practices in the industry in which it operates, does not believe are of material value or material to the operation of such Debtor's business or, with respect to state and federal rights of way, are not capable of being recorded as a matter of state and federal law.

(j) All Equipment (including, without limitation, Motor Vehicles) owned by a Debtor and subject to a certificate of title or ownership statute is described on Schedule IX hereto.

(k) All representations, warranties and covenants of the Debtors in the Purchase Agreement, the Notes or any other documents contemplated thereby are hereby incorporated herein by reference as though fully set forth herein.

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Section 3. Collateral. As collateral security for the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of the obligations due the Secured Party under the Notes, each Debtor hereby pledges and grants to the Secured Party, for the benefit of itself and each Purchaser, a Lien on and security interest in and to all of such Debtor's assets, including all right, title and interest in the following properties and assets of such Debtor, whether now owned by such Debtor or hereafter acquired and whether now existing or hereafter coming into existence and wherever located (all being collectively referred to herein as "Collateral"):

(a) all Instruments, together with all payments thereon or thereunder;

(b) all Accounts;

(c) all Inventory;

(d) all General Intangibles (including payment intangibles (as defined in the UCC) and Software);

(e) all Equipment;

(f) all Documents;

(g) all Contracts;

(h) all Goods;

(i) all Investment Property, including without limitation all equity interests now owned or hereafter acquired by such Debtor, including all of the interests in Arch Biosurgery, Inc., a Massachusetts corporation, owned by Arch Therapeutics, Inc.;

(j) all Deposit Accounts, including, without limitation, the balance from time to time in all bank accounts maintained by such Debtor;

(k) all Commercial Tort Claims specified on Schedule VII;

(l) all Trademarks, Patents and Copyrights;

(m) all books and records pertaining to the other Collateral;

(n) all Software; and

(o) all other tangible and intangible property and other assets of such Debtor, including, without limitation, all interests in real property, Proceeds, tort claims, products, accessions, rents, profits, income, benefits, substitutions, additions and replacements of and to any of the property of such Debtor described in the preceding clauses of this Section 3 (including, without limitation, any proceeds of insurance thereon, insurance claims and all rights, claims and benefits against any Person relating thereto), other rights to payments not otherwise included in the foregoing, and all books, correspondence, files, records, invoices and other papers, including without limitation all tapes, cards, computer runs, computer programs, computer files and other papers, documents and records in the possession or under the control of such Debtor, or any computer bureau or service company from time to time acting for such Debtor.

Notwithstanding anything to the contrary contained herein or in any Transaction Document, in no event shall the security interest granted herein or therein attach to any Excluded Assets.

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Section 4. Covenants; Remedies. In furtherance of the grant of the pledge and security interest pursuant to Section 3 hereof, each Debtor hereby agrees with the Secured Party as follows (subject to the Permitted Liens):

4.1 Delivery and Other Perfection; Maintenance, etc.

(a) Delivery of Instruments, Documents, Etc. Each Debtor shall deliver and pledge to the Secured Party or its Representative any and all Instruments, negotiable Documents, Chattel Paper and certificated securities (accompanied by stock powers executed in blank, which stock powers may be filled in and completed at any time upon the occurrence of any Event of Default) duly endorsed and/or accompanied by such instruments of assignment and transfer executed by such Debtor in such form and substance as the Secured Party or its Representative may request; provided, that so long as no Event of Default shall have occurred and be continuing, each Debtor may retain for collection in the ordinary course of business any Instruments, negotiable Documents and Chattel Paper received by such Debtor in the ordinary course of business, and the Secured Party or its Representative shall, promptly upon request of a Debtor, make appropriate arrangements for making any other Instruments, negotiable Documents and Chattel Paper pledged by such Debtor available to such Debtor for purposes of presentation, collection or renewal (any such arrangement to be effected, to the extent deemed appropriate by the Secured Party or its Representative, against a trust receipt or like document). If a Debtor retains possession of any Chattel Paper, negotiable Documents or Instruments pursuant to the terms hereof, such Chattel Paper, negotiable Documents and Instruments shall be marked with the following legend: "This writing and the obligations evidenced or secured hereby are subject to the security interest of [ ], in its capacity as Collateral Agent for the benefit of Purchasers, as secured party."

(b) Other Documents and Actions. Each Debtor shall give, execute, deliver, file and/or record any financing statement, registration, notice, instrument, document, agreement, Mortgage or other papers that may be necessary or desirable (in the reasonable judgment of the Secured Party or its Representative) to create, preserve, perfect or validate the security interest granted pursuant hereto (or any security interest or mortgage contemplated or required hereunder, including with respect to Section 2(h) of this Agreement) or to enable the Secured Party or its Representative to exercise and enforce the rights of the Secured Party hereunder with respect to such pledge and security interest, provided that notices to account debtors in respect of any Accounts or Instruments shall be subject to the provisions of clause (e) below. Notwithstanding the foregoing each Debtor hereby irrevocably authorizes the Secured Party at any time and from time to time to file in any filing office in any jurisdiction any initial financing statements (and other similar filings or registrations under other applicable laws and regulations pertaining to the creation, attachment, or perfection of security interests) and amendments thereto that (a) indicate the Collateral (i) as all assets of such Debtor or words of similar effect, regardless of whether any particular asset comprised in the Collateral falls within the scope of Article 9 of the UCC, or (ii) as being of an equal or lesser scope or with greater detail, and (b) contain any other information required by part 5 of Article 9 of the UCC for the sufficiency or filing office acceptance of any financing statement or amendment, including (i) whether such Debtor is an organization, the type of organization and any organization identification number issued to such Debtor, and (ii) in the case of a financing statement filed as a fixture filing, a sufficient description of real property to which the Collateral relates. Each Debtor agrees to furnish any such information to the Secured Party promptly upon request. Each Debtor also ratifies its authorization for the Secured Party to have filed in any jurisdiction any like initial financing statements or amendments thereto if filed prior to the date hereof.

(c) Books and Records. Each Debtor (or a Company on behalf of a Debtor) shall maintain at its own cost and expense complete and accurate books and records of the Collateral, including, without limitation, a record of all payments received and all credits granted with respect to the Collateral and all other dealings with the Collateral. Upon the occurrence and during the continuation of any Event of Default, each Debtor shall deliver and turn over any such books and records (or true and correct copies thereof) to the Secured Party or its Representative at any time on demand. Each Debtor shall permit any Representative of the Secured Party, to inspect such books and records at any time during reasonable business hours and will provide photocopies thereof at such Debtor's expense to the Secured Party upon request of the Secured Party.

(d) Motor Vehicles. Each Debtor shall, promptly upon acquiring same, cause the Secured Party to be listed as the lienholder on each certificate of title or ownership covering any items of Equipment, including Motor Vehicles, having a value in excess of \$50,000 individually or in the aggregate for all such items of Equipment of the Debtor, or otherwise comply with the certificate of title or ownership laws of the relevant jurisdiction issuing such certificate of title or ownership in order to properly evidence and perfect Secured Party's security interest in the assets represented by such certificate of title or ownership.

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(e) Notice to Account Debtors; Verification. (i) Upon the occurrence and during the continuance of any Event of Default (or if any rights of set-off (other than set-offs against an Account arising under the Contract giving rise to the same Account) or contra accounts may be asserted, upon request of the Secured Party or its Representative, each Debtor shall promptly notify (and each Debtor hereby authorizes the Secured Party and its Representative so to notify) each account debtor in respect of any Accounts or Instruments or other Persons obligated on the Collateral that such Collateral has been assigned to the Secured Party hereunder, and that any payments due or to become due in respect of such Collateral are to be made directly to the Secured Party, and (ii) the Secured Party and its Representative shall have the right at any time or times to make direct verification with the account debtors or other Persons obligated on the Collateral of any and all of the Accounts or other such Collateral.

(f) Intellectual Property. Each Debtor represents and warrants that the Copyrights, Patents and Trademarks listed on Schedules III, IV and V, respectively (if any), constitute all of the registered Copyrights and all of the Patents and Trademarks now owned by such Debtor. If such Debtor shall (i) obtain rights to any new patentable inventions, any registered Copyrights or any Patents or Trademarks, or (ii) become entitled to the benefit of any registered Copyrights or any Patents or Trademarks or any improvement on any Patent, the provisions of this Agreement above shall automatically apply thereto and such Debtor shall give to Secured Party prompt written notice thereof. Each Debtor hereby authorizes Secured Party to modify this Agreement by amending Schedules III, IV and V, as applicable, to include any such registered Copyrights or any such Patents and Trademarks. Each Debtor shall have the duty (i) to prosecute diligently any patent, trademark, or service mark applications pending as of the date hereof or hereafter, (ii) to preserve and maintain all rights in the Copyrights, Patents and Trademarks, to the extent material to the operations of the business of such Debtor and (iii) to ensure that the Copyrights, Patents and Trademarks are and remain enforceable, to the extent material to the operations of the business of such Debtor. Any expenses incurred in connection with such Debtor's obligations under this Section 4.1(f) shall be borne by such Debtor. Except for any such items that a Debtor reasonably believes (using prudent industry customs and practices) are no longer necessary for the on-going operations of its business, no Debtor shall abandon any material right to file a patent, trademark or service mark application, or abandon any pending patent, trademark or service mark application or any other Copyright, Patent or Trademark without the prior written consent of Secured Party, which consent shall not be unreasonably withheld.

(g) Further Identification of Collateral. Each Debtor will, when and as often as requested by the Secured Party or its Representative, furnish to the Secured Party or such Representative, statements and schedules further identifying and describing the Collateral and such other reports in connection with the Collateral as the

Secured Party or its Representative may reasonably request, all in reasonable detail.

(h) Investment Property. Each Debtor will take any and all actions required or requested by the Secured Party, from time to time, to (i) cause the Secured Party to obtain exclusive control of any Investment Property owned by such Debtor in a manner acceptable to the Secured Party and (ii) obtain from any issuers of Investment Property and such other Persons, for the benefit of the Secured Party, written confirmation of the Secured Party's control over such Investment Property. For purposes of this Section 4.1(h), the Secured Party shall have exclusive control of Investment Property if (i) such Investment Property consists of certificated securities and a Debtor delivers such certificated securities to the Secured Party (with appropriate endorsements if such certificated securities are in registered form); (ii) such Investment Property consists of uncertificated securities and either (x) a Debtor delivers such uncertificated securities to the Secured Party or (y) the issuer thereof agrees, pursuant to documentation in form and substance satisfactory to the Secured Party, that it will comply with instructions originated by the Secured Party without further consent by such Debtor, and (iii) such Investment Property consists of security entitlements and either (x) the Secured Party becomes the entitlement holder thereof or (y) the appropriate securities intermediary agrees, pursuant to the documentation in form and substance satisfactory to the Secured Party, that it will comply with entitlement orders originated by the Secured Party without further consent by any Debtor.

(i) Commercial Tort Claims. Each Debtor shall promptly notify Secured Party of any Commercial Tort Claim acquired by it that concerns a claim in excess of \$50,000 and unless otherwise consented to by Secured Party, such Debtor shall enter into a supplement to this Agreement granting to Secured Party a Lien on and security interest in such Commercial Tort Claim.

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4.2 Other Liens. Other than Permitted Liens, Debtors will not create, permit or suffer to exist, and will defend the Collateral against and take such other action as is necessary to remove, any Lien on the Collateral except Permitted Indebtedness, and will defend the right, title and interest of the Secured Party in and to the Collateral and in and to all Proceeds thereof against the claims and demands of all Persons whatsoever.

4.3 Preservation of Rights. Whether or not any Event of Default has occurred or is continuing, the Secured Party and its Representative may, but shall not be required to, take any steps the Secured Party or its Representative deems necessary or appropriate to preserve any Collateral or any rights against third parties to any of the Collateral, including obtaining insurance for the Collateral at any time when such Debtor has failed to do so, and Debtors shall promptly pay, or reimburse the Secured Party for, all expenses incurred in connection therewith.

4.4 Formation of Subsidiaries; Name Change; Location; Bailees.

(a) No Debtor shall form or acquire any subsidiary unless (i) such Debtor pledges all of the stock or equity interests of such subsidiary to the Secured Party pursuant to an agreement in a form agreed to by the Secured Party, (ii) such subsidiary becomes a party to this Agreement and all other applicable Security Documents and (iii) the formation or acquisition of such subsidiary is not prohibited by the terms of the Transaction Documents.

(b) No Debtor shall (i) reincorporate or reorganize itself under the laws of any jurisdiction other than the jurisdiction in which it is incorporated or organized as of the date hereof, or (ii) otherwise change its name, identity or corporate structure, in each case, without the prior written consent of Secured Party, which consent shall not be unreasonably withheld. Each Debtor will notify Secured Party promptly in writing prior to any such change in the proposed use by such Debtor of any tradename or fictitious business name other than any such name set forth on Schedule II attached hereto.

(c) Except for the sale of Inventory in the ordinary course of business and other sales of assets expressly permitted by the terms of the Purchase Agreement, each Debtor will keep the Collateral at the locations specified in Schedule I. Each Debtor will give Secured Party thirty (30) day's prior written notice of any change in such Debtor's chief place of business or of any new location for any of the Collateral.

(d) If any Collateral is at any time in the possession or control of any warehousemen, bailee, consignee or processor, such Debtor shall, upon the request of Secured Party or its Representative, notify such warehousemen, bailee, consignee or processor of the Lien and security interest created hereby and shall instruct such Person to hold all such Collateral for Secured Party's account subject to Secured Party's instructions.

(e) Each Debtor acknowledges that it is not authorized to file any financing statement or amendment or termination statement with respect to any financing statement without the prior written consent of Secured Party and agrees that it will not do so without the prior written consent of Secured Party, subject to such Debtor's rights under Section 9-509(d)(2) to the UCC.

(f) No Debtor shall enter into any Contract that restricts or prohibits the grant to Secured Party of a security interest in Accounts, Chattel Paper, Instruments or payment intangibles or the proceeds of the foregoing.

4.5 Reserved.

4.6 Events of Default, Etc. During the period during which an Event of Default shall have occurred:

(a) each Debtor shall, at the request of the Secured Party or its Representative, assemble the Collateral and make it available to Secured Party or its Representative at a place or places designated by the Secured Party or its Representative which are reasonably convenient to Secured Party or its Representative, as applicable, and such Debtor;

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(b) the Secured Party or its Representative may make any reasonable compromise or settlement deemed desirable with respect to any of the Collateral and may extend the time of payment, arrange for payment in installments, or otherwise modify the terms of, any of the Collateral;

(c) the Secured Party shall have all of the rights and remedies with respect to the Collateral of a secured party under the UCC (whether or not said UCC is in effect in the jurisdiction where the rights and remedies are asserted) and such additional rights and remedies to which a secured party is entitled under the laws in effect in any jurisdiction where any rights and remedies hereunder may be asserted, including, without limitation, the right, to the maximum extent permitted by law, to: (i) exercise all voting, consensual and other powers of ownership pertaining to the Collateral as if the Secured Party were the sole and absolute owner thereof (and each Debtor agrees to take all such action as may be appropriate to give effect to such right) and (ii) the appointment of a receiver or receivers for all or any part of the Collateral or business of a Debtor, whether such receivership be incident to a proposed sale or sales of such Collateral or otherwise and without regard to the value of the Collateral or the solvency of any person or persons liable for the payment of the Obligations secured by such Collateral. Each Debtor hereby consents to the appointment of such receiver or receivers, waives any and all defenses to such appointment and agrees that such appointment shall in no manner impair, prejudice or otherwise affect the rights of Secured Party under this Agreement. Each Debtor hereby expressly waives notice of a hearing for appointment of a receiver and the necessity for bond or an accounting by the receiver;

(d) the Secured Party or its Representative in its discretion may, in the name of the Secured Party or in the name of a Debtor or otherwise, demand, sue for, collect or receive any money or property at any time payable or receivable on account of or in exchange for any of the Collateral, but shall be under no obligation to do so;

(e) the Secured Party or its Representative may take immediate possession and occupancy of any premises owned, used or leased by a Debtor and exercise all other rights and remedies which may be available to the Secured Party;

(f) the Secured Party may, upon reasonable notice (such reasonable notice to be determined by Secured Party in its sole and absolute discretion, which shall not be less than ten (10) days), with respect to the Collateral or any part thereof which shall then be or shall thereafter come into the possession, custody or control of the Secured Party or its Representative, sell, lease, license, assign or otherwise dispose of all or any part of such Collateral, at such place or places as the Secured Party deems best, and for cash or for credit or for future delivery (without thereby assuming any credit risk), at public or private sale, without demand of performance or notice of intention to effect any such disposition or of the time or place thereof (except such notice as is required above or by applicable statute and cannot be waived), and the Secured Party or anyone else may be the purchaser, lessee, licensee, assignee or recipient of any or all of the Collateral so disposed of at any public sale (or, to the extent permitted by law, at any private sale) and thereafter hold the same absolutely, free from any claim or right of whatsoever kind, including any right or equity of redemption (statutory or otherwise), of Debtors, any such demand, notice and right or equity being hereby expressly waived and released. The Secured Party may, without notice or publication, adjourn any public or private sale or cause the same to be adjourned from time to time by announcement at the time and place fixed for the sale, and such sale may be made at any time or place to which the sale may be so adjourned; and

(g) the rights, remedies and powers conferred by this Section 4.6 are in addition to, and not in substitution for, any other rights, remedies or powers that the Secured Party may have under any Transaction Document, at law, in equity or by or under the UCC or any other statute or agreement. The Secured Party may proceed by way of any action, suit or other proceeding at law or in equity and no right, remedy or power of the Secured Party will be exclusive of or dependent on any other. The Secured Party may exercise any of its rights, remedies or powers separately or in combination and at any time.

The proceeds of each collection, sale or other disposition under this Section 4.6 shall be applied in accordance with Section 4.9 hereof.

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4.7 Deficiency. If the proceeds of sale, collection or other realization of or upon the Collateral are insufficient to cover the costs and expenses of such realization and the payment in full of the Obligations, Debtors shall remain jointly and severally liable for any deficiency.

4.8 Private Sale. Each Debtor recognizes that the Secured Party may be unable to effect a public sale of any or all of the Collateral consisting of securities by reason of certain prohibitions contained in the Securities Act of 1933, as amended (the "**Act**"), and applicable state securities laws, but may be compelled to resort to one or more private sales thereof to a restricted group of purchasers who will be obliged to agree, among other things, to acquire such Collateral for their own account for investment and not with a view to the distribution or resale thereof. Each Debtor acknowledges and agrees that any such private sale may result in prices and other terms less favorable to the seller than if such sale were a public sale and each Debtor agrees that it is not commercially unreasonable for Secured Party to engage in any such private sales or dispositions under such circumstances. The Secured Party shall be under no obligation to delay a sale of any of the Collateral to permit a Debtor to register such Collateral for public sale under the Act, or under applicable state securities laws, even if Debtors would agree to do so. The Secured Party shall not incur any liability as a result of the sale of any such Collateral, or any part thereof, at any private sale provided for in this Agreement conducted in a commercially reasonable manner, and so long as Secured Party conducts such sale in a commercially reasonable manner each Debtor hereby waives any claims against the Secured Party arising by reason of the fact that the price at which the Collateral may have been sold at such a private sale was less than the price which might have been obtained at a public sale or was less than the aggregate amount of the Obligations, even if the Secured Party accepts the first offer received and does not offer the Collateral to more than one offeree.

Each Debtor further agrees to do or cause to be done all such other acts and things as may be necessary to make such sale or sales of any portion or all of any such Collateral valid and binding and in compliance with any and all applicable laws, regulations, orders, writs, injunctions, decrees or awards of any and all courts, arbitrators or governmental instrumentalities, domestic or foreign, having jurisdiction over any such sale or sales, all at such Debtor's expense. Each Debtor further agrees that a breach of any of the covenants contained in this Section 4.8 will cause irreparable injury to the Secured Party, that the Secured Party has no adequate remedy at law in respect of such breach and, as a consequence, agrees that each and every covenant contained in this Section 4.8 shall be specifically enforceable against Debtors, and each Debtor hereby waives and agrees not to assert any defenses against an action for specific performance of such covenants except for a defense that no Event of Default has occurred and is continuing.

4.9 Application of Proceeds. The proceeds of any collection, sale or other realization of all or any part of the Collateral, and any other cash at the time held by the Secured Party under this Agreement, shall be applied to the Obligations on a pro-rata basis based on investments made under the Securities Purchase Agreement as detailed on Schedule 4.9.

4.10 Attorney-in-Fact. Each Debtor hereby irrevocably constitutes and appoints the Secured Party, with full power of substitution, as its true and lawful attorney-in-fact with full irrevocable power and authority in the place and stead of such Debtor and in the name of such Debtor or in its own name, from time to time in the discretion of the Secured Party, for the purpose of carrying out the terms of this Agreement, to take any and all appropriate action and to execute and deliver any and all documents and instruments which may be necessary or desirable to perfect or protect any security interest granted hereunder, to maintain the perfection or priority of any security interest granted hereunder, or to otherwise accomplish the purposes of this Agreement, and, without limiting the generality of the foregoing, hereby gives the Secured Party the power and right, on behalf of such Debtor, without notice to or assent by such Debtor (to the extent permitted by applicable law), to do the following:

(a) to take any and all appropriate action and to execute and deliver any and all documents and instruments which may be necessary or desirable to accomplish the purposes of this Agreement;

(b) upon the occurrence and during the continuation of an Event of Default, to ask, demand, collect, receive and give acquittance and receipts for any and all moneys due and to become due under any Collateral and, in the name of such Debtor or its own name or otherwise, to take possession of and endorse and collect any checks, drafts, notes, acceptances or other Instruments for the payment of moneys due under any Collateral and to file any claim or to take any other action or proceeding in any court of law or equity or otherwise deemed appropriate by the Secured Party for the purpose of collecting any and all such moneys due under any Collateral whenever payable and to file any claim or to take any other action or proceeding in any court of law or equity or otherwise deemed appropriate by the Secured Party for the purpose of collecting any and all such moneys due under any Collateral whenever payable;

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(c) to pay or discharge charges or liens levied or placed on or threatened against the Collateral, to effect any insurance called for by the terms of this Agreement and to pay all or any part of the premiums therefor;

(d) to direct any party liable for any payment under any of the Collateral to make payment of any and all moneys due, and to become due thereunder, directly to the Secured Party or as the Secured Party shall direct, and to receive payment of and receipt for any and all moneys, claims and other amounts due, and to become due at any time, in respect of or arising out of any Collateral;

(e) upon the occurrence and during the continuation of an Event of Default, to sign and indorse any invoices, freight or express bills, bills of lading, storage or warehouse receipts, drafts against debtors, assignments, verifications and notices in connection with accounts and other Documents constituting or relating to the Collateral;

(f) upon the occurrence and during the continuation of an Event of Default, to commence and prosecute any suits, actions or proceedings at law or in

equity in any court of competent jurisdiction to collect the Collateral or any part thereof and to enforce any other right in respect of any Collateral;

(g) upon the occurrence and during the continuation of an Event of Default, to defend any suit, action or proceeding brought against a Debtor with respect to any Collateral;

(h) upon the occurrence and during the continuation of an Event of Default, to settle, compromise or adjust any suit, action or proceeding described above and, in connection therewith, to give such discharges or releases as the Secured Party may deem appropriate;

(i) to the extent that a Debtor's authorization given in Section 4.1(b) of this Agreement is not sufficient to file such financing statements with respect to this Agreement, with or without such Debtor's signature, or to file a photocopy of this Agreement in substitution for a financing statement, as the Secured Party may deem appropriate and to execute in such Debtor's name such financing statements and amendments thereto and continuation statements which may require such Debtor's signature;

(j) upon the occurrence and during the continuation of an Event of Default, generally to sell, transfer, pledge, make any agreement with respect to or otherwise deal with any of the Collateral as fully and completely as though the Secured Party were the absolute owners thereof for all purposes; and

(k) to do, at the Secured Party's option and at such Debtor's expense, at any time, or from time to time, all acts and things which the Secured Party reasonably deems necessary to protect or preserve or, upon the occurrence and during the continuation of an Event of Default, realize upon the Collateral and the Secured Party's lien therein, in order to effect the intent of this Agreement, all as fully and effectively as such Debtor might do.

Each Debtor hereby ratifies, to the extent permitted by law, all that such attorneys lawfully do or cause to be done by virtue hereof provided the same is performed in a commercially reasonable manner. The power of attorney granted hereunder is a power coupled with an interest and shall be irrevocable until the Obligations are indefeasibly paid in full in cash and this Agreement is terminated in accordance with Section 4.12 hereof.

Each Debtor also authorizes the Secured Party, at any time from and after the occurrence and during the continuation of any Event of Default, (x) to communicate in its own name with any party to any Contract with regard to the assignment of the right, title and interest of such Debtor in and under the Contracts hereunder and other matters relating thereto and (y) to execute, in connection with any sale of Collateral provided for in Section 4.6 hereof, any endorsements, assignments or other instruments of conveyance or transfer with respect to the Collateral.

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4.11 Perfection. Prior to or concurrently with the execution and delivery of this Agreement, each Debtor shall:

(a) file such financing statements, assignments for security and other documents in such offices as may be necessary or as the Secured Party or the Representative may request to perfect the security interests granted by Section 3 of this Agreement;

(b) at Secured Party's request, deliver to the Secured Party or its Representative the originals of all Instruments together with, in the case of Instruments constituting promissory notes, allonges attached thereto showing such promissory notes to be payable to the order of a blank payee;

(c) deliver to the Secured Party or its Representative the originals of all Motor Vehicle Titles, duly endorsed indicating the Secured Party's interest therein as a lienholder, together with such other documents as may be required consistent with Section 4.1(d) hereof to perfect the security interest granted by Section 3 in all such Motor Vehicles (if any).

(d) If the Debtor has not done so, the Collateral Agent may do so at any later time at the sole cost of the Debtors.

4.12 Termination; Partial Release of Collateral. This Agreement and the Liens and security interests granted hereunder shall not terminate until the full and complete performance and indefeasible satisfaction of all of the Obligations (including, without limitation, the indefeasible payment in full in cash of all such Obligations) (i) in respect of the Transaction Documents, and (ii) with respect to which claims have been asserted by Collateral Agent and/or Purchasers, whereupon the Secured Party shall forthwith cause to be assigned, transferred and delivered, against receipt but without any recourse, warranty or representation whatsoever, any remaining Collateral to or on the order of Debtors. The Secured Party shall also execute and deliver to Debtors upon such termination and at Debtors' expense such UCC termination statements, certificates for terminating the liens on the Motor Vehicles (if any) and such other documentation as shall be reasonably requested by Debtors to effect the termination and release of the Liens and security interests in favor of the Secured Party affecting the Collateral. Notwithstanding anything to the contrary in this Agreement, upon full and complete satisfaction of the Notes Debtors obligations under this Agreement shall terminate and any Liens shall thereupon be void.

4.13 Further Assurances. At any time and from time to time, upon the written request of the Secured Party or its Representative, and at the sole expense of Debtors, Debtors will promptly and duly execute and deliver any and all such further instruments, documents and agreements and take such further actions as the Secured Party or its Representative may reasonably require in order for the Secured Party to obtain the full benefits of this Agreement and of the rights and powers herein granted in favor of the Secured Party, including, without limitation, using Debtors' best efforts to secure all consents and approvals necessary or appropriate for the assignment to the Secured Party of any Collateral held by Debtors or in which a Debtor has any rights not heretofore assigned, the filing of any financing or continuation statements under the UCC with respect to the liens and security interests granted hereby, transferring Collateral to the Secured Party's possession (if a security interest in such Collateral can be perfected by possession), placing the interest of the Secured Party as lienholder on the certificate of title of any Motor Vehicle, and obtaining waivers of liens from landlords and mortgagees. Each Debtor also hereby authorizes the Secured Party and its Representative to file any such financing or continuation statement without the signature of such Debtor to the extent permitted by applicable law.

4.14 Limitation on Duty of Secured Party. The powers conferred on the Secured Party under this Agreement are solely to protect the Secured Party's interest on behalf of itself and the Purchasers in the Collateral and shall not impose any duty upon it to exercise any such powers. The Secured Party shall be accountable only for amounts that it actually receives as a result of the exercise of such powers and neither the Secured Party nor its Representative nor any of their respective officers, directors, employees or agents shall be responsible to Debtors for any act or failure to act, except for gross negligence or willful misconduct. Without limiting the foregoing, the Secured Party and any Representative shall be deemed to have exercised reasonable care in the custody and preservation of the Collateral in their possession if such Collateral is accorded treatment substantially equivalent to that which the relevant Secured Party or any Representative, in its individual capacity, accords its own property consisting of the type of Collateral involved, it being understood and agreed that neither the Secured Party nor any Representative shall have any responsibility for taking any necessary steps (other than steps taken in accordance with the standard of care set forth above) to preserve rights against any Person with respect to any Collateral.

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Also without limiting the generality of the foregoing, neither the Secured Party nor any Representative shall have any obligation or liability under any Contract or license by reason of or arising out of this Agreement or the granting to the Secured Party of a security interest therein or assignment thereof or the receipt by the Secured Party or any Representative of any payment relating to any Contract or license pursuant hereto, nor shall the Secured Party or any Representative be required or obligated in any manner to perform or fulfill any of the obligations of Debtors under or pursuant to any Contract or license, or to make any payment, or to make any inquiry as to the nature or the sufficiency of any payment received by it or the sufficiency of any performance by any party under any Contract or license, or to present or file any claim, or to take any action to collect or enforce any performance or the payment of any amounts which may have been assigned to it or to which it may be entitled at any time or times.

Section 5. Miscellaneous.

5.1 No Waiver. No failure on the part of the Secured Party or any of its Representatives to exercise, and no course of dealing with respect to, and no delay in exercising, any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise by the Secured Party or any of its Representatives of any right, power or remedy hereunder preclude any other or further exercise thereof or the exercise of any other right, power or remedy. The rights and remedies hereunder provided are cumulative and may be exercised singly or concurrently, and are not exclusive of any rights and remedies provided by law.

5.2 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Agreement 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.

5.3 Notices. All notices, approvals, requests, demands and other communications hereunder shall be delivered or made in the manner set forth in, and shall be effective in accordance with the terms of, the Purchase Agreement. Debtors and Collateral Agent may change their respective notice addresses by written notice given to each other party five (5) days prior to the effectiveness of such change.

5.4 Amendments, Etc. The terms of this Agreement may be waived, altered or amended only by an instrument in writing duly executed by the Debtor sought to be charged or benefited thereby and each of the Purchasers. Any such amendment or waiver shall be binding upon the Secured Party and the Debtor sought to be charged or benefited thereby and their respective successors and assigns.

5.5 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the respective successors and assigns of each of the parties hereto, provided, that no Debtor shall assign or transfer its rights hereunder without the prior written consent of each of the Secured Parties. Any Secured Party, including the Collateral Agent in its capacity as Collateral Agent, may assign its rights hereunder without the consent of Debtors, in which event such assignee shall be deemed to be Secured Party and/or Collateral Agent, as applicable, hereunder with respect to such assigned rights; provided, so long as no Event of Default has occurred and is continuing, no Secured Party shall assign any of its rights hereunder to a competitor of any Company.

5.6 Counterparts; Headings. This Agreement may be authenticated in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the parties hereto may authenticate this Agreement by signing any such counterpart. This Agreement may be authenticated by manual signature or facsimile, .pdf or similar electronic signature, all of which shall be equally valid. The headings in this Agreement are for convenience of reference only and shall not alter or otherwise affect the meaning hereof.

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5.7 Severability. If any provision hereof is invalid and unenforceable in any jurisdiction, then, to the fullest extent permitted by law, (a) the other provisions hereof shall remain in full force and effect in such jurisdiction and shall be liberally construed in favor of the Secured Party and its Representative in order to carry out the intentions of the parties hereto as nearly as may be possible and (b) the invalidity or unenforceability of any provision hereof in any jurisdiction shall not affect the validity or enforceability of such provision in any other jurisdiction.

5.8 **SUBMISSION TO JURISDICTION; WAIVER OF VENUE; SERVICE OF PROCESS.** EACH DEBTOR HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF ANY UNITED STATES FEDERAL OR NEW YORK STATE COURT SITTING IN NEW YORK COUNTY, BOROUGH OF MANHATTAN, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT AND EACH DEBTOR HEREBY IRREVOCABLY AGREES THAT ALL CLAIMS IN RESPECT OF SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN ANY SUCH COURT AND IRREVOCABLY WAIVES ANY OBJECTION IT MAY NOW OR HEREAFTER HAVE AS TO THE VENUE OF ANY SUCH SUIT, ACTION OR PROCEEDING BROUGHT IN SUCH A COURT OR THAT SUCH COURT IS AN INCONVENIENT FORUM. NOTHING HEREIN SHALL LIMIT THE RIGHT OF SECURED PARTY TO BRING PROCEEDINGS AGAINST ANY DEBTOR IN THE COURTS OF ANY OTHER JURISDICTION. ANY JUDICIAL PROCEEDING BY A DEBTOR AGAINST SECURED PARTY, ANY PURCHASER OR ANY AFFILIATE THEREOF INVOLVING, DIRECTLY OR INDIRECTLY, ANY MATTER IN ANY WAY ARISING OUT OF, RELATED TO, OR CONNECTION WITH THIS AGREEMENT SHALL BE BROUGHT ONLY IN A COURT IN NEW YORK COUNTY, BOROUGH OF MANHATTAN (AND SECURED PARTY AND PURCHASERS HEREBY SUBMIT TO THE JURISDICTION OF SUCH COURT). EACH DEBTOR HERETO HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH ACTION OR PROCEEDING BY MAILING BY REGISTERED OR CERTIFIED MAIL A COPY THEREOF TO SUCH DEBTOR AT THE ADDRESS FOR NOTICES TO IT IN ACCORDANCE WITH SECTION 5.3 OF THIS AGREEMENT AND AGREES THAT SUCH NOTICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT OF SECURED PARTY OR ANY PURCHASER TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW.

5.9 **WAIVER OF RIGHT TO TRIAL BY JURY.** EACH DEBTOR AND SECURED PARTY WAIVE THEIR RESPECTIVE RIGHTS TO A TRIAL BY JURY OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF OR RELATED TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY, IN ANY ACTION, PROCEEDING OR OTHER LITIGATION OF ANY TYPE BROUGHT BY ANY OF THE PARTIES AGAINST ANY OTHER PARTY OR PARTIES, WHETHER WITH RESPECT TO CONTRACT CLAIMS, TORT CLAIMS, OR OTHERWISE. EACH DEBTOR AND SECURED PARTY AGREE THAT ANY SUCH CLAIM OR CAUSE OF ACTION SHALL BE TRIED BY A COURT TRIAL WITHOUT A JURY. WITHOUT LIMITING THE FOREGOING, THE PARTIES FURTHER AGREE THAT THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY IS WAIVED BY OPERATION OF THIS SECTION 5.9 AS TO ANY ACTION, COUNTERCLAIM OR OTHER PROCEEDING WHICH SEEKS, IN WHOLE OR IN PART, TO CHALLENGE THE VALIDITY OR ENFORCEABILITY OF THIS AGREEMENT OR ANY PROVISION HEREOF. THIS WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT.

5.10 Joint and Several. The obligations, covenants and agreements of Debtors hereunder shall be the joint and several obligations, covenants and agreements of each Debtor, whether or not specifically stated herein without preferences or distinction among them.

5.11 Collateral Agent and Purchaser Indemnification.

(a) Each Purchaser has pursuant to the Purchase Agreement designated and appointed the Collateral Agent as the administrative agent of such Purchaser under this Agreement and the related agreements.

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(b) Nothing in this Section 5.11 shall be deemed to limit or otherwise affect the rights of Secured Party or Purchasers to exercise any remedy provided in this Agreement or any other Transaction Document.

(c) If pursuant to any related agreement Secured Party is given the discretion to allocate proceeds received by Secured Party pursuant to the exercise of remedies under the related agreements or at law or in equity (including without limitation with respect to any secured creditor remedies exercised against the Collateral and any other collateral security provided for under any related agreement), Secured Party shall apply such proceeds to the then outstanding Obligations in the following order of priority (with amounts received being applied in the numerical order set forth below until exhausted prior to the application to the next succeeding category and each of the

Purchasers or other Persons entitled to payment shall receive an amount equal to its pro rata share of amounts available to be applied pursuant to clauses second, third and fourth below):

- first, to payment of fees, costs and expenses (including reasonable attorney’s fees) owing to the Secured Party;
- second, to payment of all accrued unpaid interest and fees (other than fees owing to Collateral Agent) on the Obligations;
- third, to payment of principal of the Obligations;
- fourth, to payment of any other amounts owing constituting Obligations; and
- fifth, any remainder shall be for the account of and paid to whoever may be lawfully entitled thereto.

5.12 No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

5.13 ENTIRE AGREEMENT; AMENDMENT. THIS AGREEMENT, TOGETHER WITH THE OTHER TRANSACTION DOCUMENTS, SUPERSEDES ALL OTHER PRIOR ORAL OR WRITTEN AGREEMENTS BETWEEN SECURED PARTY, THE DEBTORS, THEIR AFFILIATES AND PERSONS ACTING ON THEIR BEHALF WITH RESPECT TO THE MATTERS DISCUSSED HEREIN, AND THIS AGREEMENT, TOGETHER WITH THE OTHER TRANSACTION DOCUMENTS AND THE OTHER INSTRUMENTS REFERENCED HEREIN AND THEREIN, CONTAIN THE ENTIRE UNDERSTANDING OF THE PARTIES WITH RESPECT TO THE MATTERS COVERED HEREIN AND THEREIN AND, EXCEPT AS SPECIFICALLY SET FORTH HEREIN OR THEREIN, NEITHER THE SECURED PARTY NOR ANY DEBTOR MAKES ANY REPRESENTATION, WARRANTY, COVENANT OR UNDERTAKING WITH RESPECT TO SUCH MATTERS. AS OF THE DATE OF THIS AGREEMENT, THERE ARE NO UNWRITTEN AGREEMENTS BETWEEN THE PARTIES WITH RESPECT TO THE MATTERS DISCUSSED HEREIN. NO PROVISION OF THIS AGREEMENT MAY BE AMENDED, MODIFIED OR SUPPLEMENTED OTHER THAN BY AN INSTRUMENT IN WRITING SIGNED BY THE DEBTORS AND THE SECURED PARTY.

- Remainder of Page Intentionally Left Blank; Signature Page Follows -

IN WITNESS WHEREOF, the parties hereto have caused this Security Agreement to be duly executed and delivered as of the day and year first above written.

**DEBTOR:**

ARCH THERAPEUTICS, INC., a Nevada corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**DEBTOR:**

ARCH BIOSURGERY, INC., a Massachusetts corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**COLLATERAL AGENT:**

[ ]  
By:  
Name:  
Title:  
Notice Address:

**EXHIBIT A**

Form of Joinder

Joinder to Security Agreement

The undersigned, \_\_\_\_\_, hereby joins in the execution of that certain Security Agreement dated as of May \_\_, 2024 (as amended, restated, supplemented or otherwise modified from time to time, the “Security Agreement”) by Arch Therapeutics, Inc., a Nevada corporation and the Purchasers (as defined therein), and each other Person that becomes a Debtor or a Purchaser thereunder after the date thereof and hereof and pursuant to the terms thereof, to and in favor of [ ], in its capacity as Collateral Agent for Purchasers. By executing this Joinder, the undersigned hereby agrees that it is a Debtor thereunder and agrees to be bound by all of the terms and provisions of the Security Agreement. The undersigned represents and warrants that the representations and warranties set forth in the Security Agreement are, with respect to the undersigned, true and correct as of the date hereof.

The undersigned represents and warrants to Secured Party that:

- (a) all of the Equipment, Inventory and Goods owned by such Debtor is located at the places as specified on Schedule I and such Debtor conducts business in the jurisdiction set forth on Schedule I;
- (b) except as disclosed on Schedule I, none of such Collateral is in the possession of any bailee, warehousemen, processor or consignee;
- (c) the chief place of business, chief executive office and the office where such Debtor keeps its books and records are located at the place specified on Schedule I;

(d) such Debtor (including any Person acquired by such Debtor) does not do business or has not done business during the past five years under any tradename or fictitious business name, except as disclosed on Schedule II;

(e) all Copyrights, Patents and Trademarks owned or licensed by the undersigned are listed in Schedules III, IV and V, respectively;

(f) all Deposit Accounts, securities accounts, brokerage accounts and other similar accounts maintained by such Debtor, and the financial institutions at which such accounts are maintained, are listed on Schedule VI;

(g) all Commercial Tort Claims of such Debtor are listed on Schedule VII;

(h) all interests in real property and mining rights held by such Debtor are listed on Schedule VIII;

(i) all Equipment (including Motor Vehicles) owned by such debtor are listed on Schedule IX.

\_\_\_\_\_, a \_\_\_\_\_  
By:  
Title:  
FEIN: \_\_\_\_\_

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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT (“Agreement”) is entered into as of May \_\_, 2024 by and between Arch Therapeutics, Inc., a Nevada corporation (the “Company”), Arch Biosurgery, Inc., a Massachusetts corporation (together with each other Person who becomes a party to this Agreement by execution of a joinder in the form of Exhibit A attached hereto, which shall include all wholly-owned or majority-owned subsidiaries of the Company acquired after the date hereof for so long as this Agreement remains in effect, are hereinafter sometimes referred to individually as a “Debtor” and, collectively, as the “Debtors”), and [ ], acting as the Collateral Agent for the benefit of itself and [ ] (collectively, the “Secured Parties”).

### RECITALS

WHEREAS, the Secured Parties are parties to the Purchase Agreement (as hereafter defined), pursuant to which such Purchasers will purchase from the Company certain senior secured convertible notes each made by the Company and dated as of the date hereof (all such notes, together with any promissory notes or other securities issued in exchange or substitution therefor or replacement thereof, and as any of the same may be amended, supplemented, restated or modified and in effect from time to time, the “Notes”);

AND WHEREAS, the Notes are being acquired by the Secured Parties, and Secured Parties have made certain financial accommodations to the Company pursuant to that certain Securities Purchase Agreement, dated as of the date hereof among the Company, the Secured Parties, and certain other parties thereto (as the same may be amended, restated, supplemented or otherwise modified from time to time, the “Purchase Agreement”). Capitalized terms used herein but not otherwise defined shall have the meanings set forth in the Purchase Agreement;

AND WHEREAS, each Debtor will derive substantial benefit and advantage from the financial accommodations to the Company set forth in the Purchase Agreement and the Notes, and it will be to each such Debtor’s direct interest and economic benefit to assist the Company in procuring said financial accommodations from Purchasers;

AND WHEREAS, to induce Secured Parties to enter into the Purchase Agreement and purchase the Notes, each Debtor will pledge and grant a security interest in all of its right, title and interest in and to the Intellectual Property Collateral (as hereinafter defined) as security for its Obligations for the benefit of the Secured Parties and their respective successors and assigns.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

### AGREEMENT

Section 1. Grant of Security Interest. To secure its obligations under the Loan Agreement, Debtors grant and pledge to Secured Parties a security interest in all of Debtors’ right, title and interest in, to and under its intellectual property (all of which shall collectively be called the “Intellectual Property Collateral”), including, without limitation, the following:

1.1 Any and all copyright rights, copyright applications, copyright registrations and intellectual property rights in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the “Copyrights”);

1.2 Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held for use;

1.3 Any and all design rights that may be available to Debtors now or hereafter existing, created, acquired or held for use;

1.4 All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto and any patents and patent applications claiming the priority benefit of the patents and patent applications set forth on Exhibit B attached hereto (collectively, the “Patents”);

1.5 Any trademark and service mark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Debtors connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto and excluding only United States intent-to-use trademark applications to the extent that, and solely during the period in which, the grant, attachment, or enforcement of a security interest therein would, under applicable federal law, impair the registrability of such applications or the validity or enforceability of registrations issuing from such applications (collectively, the “Trademarks”);

1.6 Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

1.7 All rights of Grantor accruing under any of the Copyrights, Patents, or Trademarks and all fees and royalties arising from such rights;

1.8 All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, or Patents; and

1.9 All proceeds now or hereafter due or payable with respect to any of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payment in respect of any of the foregoing.

Section 2. Recordation. Debtors authorize the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other government officials to record and register this Agreement upon request by Secured Parties.

Section 3. Authorization. Debtors hereby authorize Secured Parties to (a) modify this Agreement unilaterally by amending the exhibits to this Agreement to include any Intellectual Property Collateral which Debtor obtains subsequent to the date of this Agreement, and (b) file a duplicate original of this Agreement containing amended exhibits reflecting such new Intellectual Property Collateral.

Section 4. Loan Documents. This Agreement has been entered into pursuant to and in conjunction with the Purchase Agreement and the Notes, which are hereby

incorporated by reference. The provisions of the Purchase Agreement and the Notes shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of Secured Parties with respect to the Intellectual Property Collateral are as provided by the Purchase Agreement and related documents, and nothing in this Agreement shall be deemed to limit such rights and remedies.

Section 5. Miscellaneous.

5.1 No Waiver. No failure on the part of the Secured Parties or any of their Representatives to exercise, and no course of dealing with respect to, and no delay in exercising, any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise by the Secured Parties or any of their Representatives of any right, power or remedy hereunder preclude any other or further exercise thereof or the exercise of any other right, power or remedy. The rights and remedies hereunder provided are cumulative and may be exercised singly or concurrently, and are not exclusive of any rights and remedies provided by law.

5.2 Governing Law. The construction, validity, enforcement and interpretation of this Agreement and any claim, controversy, dispute, or cause of action (whether in contract or tort or otherwise) based upon, arising out of, or relating to this Agreement and the transactions contemplated hereby 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.

5.3 Notices. All notices, approvals, requests, demands and other communications hereunder shall be delivered or made in the manner set forth in, and shall be effective in accordance with the terms of, the Purchase Agreement. Debtors may change their respective notice addresses by written notice given to Secured Parties five (5) days prior to the effectiveness of such change.

5.4 Amendments, Etc. The terms of this Agreement may be waived, altered or amended only by an instrument in writing duly executed by the Debtor sought to be charged or benefited thereby and each of the Secured Parties. Any such amendment or waiver shall be binding upon the Secured Parties and the Debtor sought to be charged or benefited thereby and their respective successors and assigns.

5.5 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the respective successors and assigns of each of the parties hereto, provided, that no Debtor shall assign or transfer its rights hereunder without the prior written consent of each of the Secured Parties. Secured Parties may assign their rights hereunder without the consent of Debtors, in which event such assignee shall be deemed to be a Secured Party hereunder with respect to such assigned rights; provided, so long as no Event of Default has occurred and is continuing, Secured Parties shall not assign any of their rights hereunder to a competitor of any Company.

5.6 Counterparts; Headings. This Agreement may be executed in counterparts, all of which taken together shall constitute one and the same instrument and any of the parties hereto may execute this Agreement by signing any such counterpart. This Agreement may be executed by manual signature or or similar electronic signature, all of which shall be equally valid. The headings in this Agreement are for convenience of reference only and shall not alter or otherwise affect the meaning hereof.

5.7 Severability. If any provision hereof is invalid and unenforceable in any jurisdiction, then, to the fullest extent permitted by law, (a) the other provisions hereof shall remain in full force and effect in such jurisdiction and shall be construed in order to carry out the intentions of the parties hereto as closely as possible and (b) the invalidity or unenforceability of any provision hereof in any jurisdiction shall not affect the validity or enforceability of such provision in any other jurisdiction.

**5.8 SUBMISSION TO JURISDICTION; WAIVER OF VENUE; SERVICE OF PROCESS. EACH DEBTOR HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF ANY UNITED STATES FEDERAL OR NEW YORK STATE COURT SITTING IN NEW YORK COUNTY, BOROUGH OF MANHATTAN, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT AND EACH DEBTOR HEREBY IRREVOCABLY AGREES THAT ALL CLAIMS IN RESPECT OF SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN ANY SUCH COURT AND IRREVOCABLY WAIVES ANY OBJECTION IT MAY NOW OR HEREAFTER HAVE AS TO THE VENUE OF ANY SUCH SUIT, ACTION OR PROCEEDING BROUGHT IN SUCH A COURT OR THAT SUCH COURT IS AN INCONVENIENT FORUM. NOTHING HEREIN SHALL LIMIT THE RIGHT OF SECURED PARTIES TO BRING PROCEEDINGS AGAINST ANY DEBTOR IN THE COURTS OF ANY OTHER JURISDICTION. ANY JUDICIAL PROCEEDING BY A DEBTOR AGAINST SECURED PARTIES OR ANY AFFILIATE THEREOF INVOLVING, DIRECTLY OR INDIRECTLY, ANY MATTER IN ANY WAY ARISING OUT OF, RELATED TO, OR CONNECTION WITH THIS AGREEMENT SHALL BE BROUGHT ONLY IN A COURT IN NEW YORK COUNTY, BOROUGH OF MANHATTAN (AND SECURED PARTIES HEREBY SUBMIT TO THE JURISDICTION OF SUCH COURT). EACH DEBTOR HERETO HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH ACTION OR PROCEEDING BY MAILING BY REGISTERED OR CERTIFIED MAIL A COPY THEREOF TO SUCH DEBTOR AT THE ADDRESS FOR NOTICES TO IT IN ACCORDANCE WITH SECTION 5.3 OF THIS AGREEMENT AND AGREES THAT SUCH NOTICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT OF SECURED PARTIES TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW.**

**5.9 WAIVER OF RIGHT TO TRIAL BY JURY. EACH DEBTOR AND SECURED PARTIES WAIVE THEIR RESPECTIVE RIGHTS TO A TRIAL BY JURY OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF OR RELATED TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY, IN ANY ACTION, PROCEEDING OR OTHER LITIGATION OF ANY TYPE BROUGHT BY ANY OF THE PARTIES AGAINST ANY OTHER PARTY OR PARTIES, WHETHER WITH RESPECT TO CONTRACT CLAIMS, TORT CLAIMS, OR OTHERWISE. EACH DEBTOR AND SECURED PARTIES AGREE THAT ANY SUCH CLAIM OR CAUSE OF ACTION SHALL BE TRIED BY A COURT TRIAL WITHOUT A JURY. WITHOUT LIMITING THE FOREGOING, THE PARTIES FURTHER AGREE THAT THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY IS WAIVED BY OPERATION OF THIS SECTION 5.9 AS TO ANY ACTION, COUNTERCLAIM OR OTHER PROCEEDING WHICH SEEKS, IN WHOLE OR IN PART, TO CHALLENGE THE VALIDITY OR ENFORCEABILITY OF THIS AGREEMENT OR ANY PROVISION HEREOF. THIS WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT.**

5.10 Joint and Several. The obligations, covenants and agreements of Debtors hereunder shall be the joint and several obligations, covenants and agreements of each Debtor, whether or not specifically stated herein without preferences or distinction among them.

[Signature page follows.]

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

<b>DEBTOR:</b>  <b>ARCH THERAPEUTICS, INC., a Nevada corporation</b>  By: _____ Name: _____	<b>DEBTOR:</b>  <b>ARCH BIOSURGERY, INC., a Massachusetts corporation</b>  By: _____ Name: _____
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Its

Its

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**COLLATERAL AGENT:**

[ ]

By:

Name:

Its

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EXHIBIT A

COPYRIGHTS

A-1

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EXHIBIT B

PATENTS

B-1

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EXHIBIT C

TRADEMARKS

C-1

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