

**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 20, 2024**

MyMD Pharmaceuticals, Inc.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction
of incorporation)

001-36268

(Commission
File No.)

22-2983783

(IRS Employer
Identification No.)

**MyMD Pharmaceuticals, Inc.
855 N. Wolfe Street, Suite 623
Baltimore, MD 21205**

(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: **(856) 848-8698**

(Former name or former address, if changed since last report.)

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:

- 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
Common stock, par value \$0.001 per share	MYMD	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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.

Series G and Series F-1 Purchase Agreements

On May 20, 2024, MyMD Pharmaceuticals, Inc. (the "Company") entered into a Securities Purchase Agreement (the "Series G Purchase Agreement") with certain accredited investors (the "Series G Investors"), pursuant to which it agreed to sell to the Series G Investors (i) an aggregate of 8,950 shares of the Company's newly-designated Series G Convertible Preferred Stock, with a par value of \$0.001 per share and a stated value of \$1,000 per share, initially convertible into up to 4,928,415 shares of the Company's common stock, par value \$0.001 per share (the "Common Stock") at a conversion price of \$1.816 per share (the "Series G Preferred Stock"), (ii) short-term warrants to acquire up to an aggregate of 4,928,416 shares of Common Stock (the "Series G Short-Term Warrants") at an exercise price of \$1.816 per share, and (iii) warrants to acquire up to an aggregate of 4,928,416 shares of Common Stock (the "Series G Long-Term Warrants," and collectively with the Series G Short-Term Warrants, the "Series G Warrants") at an exercise price of \$1.816 per share (collectively, the "Series G Private Placement").

On May 20, 2024, the Company entered into a Securities Purchase Agreement (the "Series F-1 Purchase Agreement," and collectively with the Series G Purchase Agreement, each a "Purchase Agreement" and collectively, the "Purchase Agreements") with certain accredited investors (the "Series F-1 Investors," and collectively with the Series G Investors, the "Investors"), pursuant to which it agreed to sell to the Series F-1 Investors (i) an aggregate of 5,050 shares of the Company's newly-designated Series F-1 Convertible Preferred Stock, with a par value of \$0.001 per share and a stated value of \$1,000 per share, initially convertible into up to 2,780,837 shares of Common Stock at a conversion price of \$1.816 per share (the "Series F-1 Preferred Stock," and collectively with the Series G Preferred Stock, the "Preferred Stock"), (ii) short-term warrants to acquire up to an aggregate of 1,183,921 shares of Common Stock (the "Series F-1 Short-Term Warrants") at an exercise price of \$1.816 per share, and (iii) warrants to acquire up to an aggregate of 1,183,921 shares of Common Stock (the "Series F-1 Long-Term Warrants," and collectively with the Series F-1 Short-Term Warrants, the "Series F-1 Warrants", and together with Series G Warrants, the "Warrants") at an exercise price of \$1.816 per share (collectively, the "Series F-1 Private Placement," and collectively with the Series G Private Placement, each a "Private Placement" and collectively, the "Private Placements").

The Private Placements are exempt from the registration requirements of the Securities Act of 1933, as amended (the “Securities Act”), pursuant to the exemption for transactions by an issuer not involving any public offering under Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D of the Securities Act and in reliance on similar exemptions under applicable state laws. Each of the Investors has represented to the Company that it is an accredited investor within the meaning of Rule 501(a) of Regulation D and that it is acquiring the applicable securities for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof. The Preferred Stock and Warrants are being offered without any general solicitation by the Company or its representatives.

The closing of each Private Placement is expected to occur on or around May 22, 2024 (the “Closing Date”), subject to the satisfaction of customary closing conditions. The aggregate gross proceeds from the Series G Private Placement are expected to be \$8.9 million and the aggregate gross proceeds from the Series F-1 Private Placement are expected to be \$5.0 million. The Company expects to use the net proceeds from the Private Placements for general corporate purposes.

Each Purchase Agreement contains certain representations and warranties, covenants and indemnification provisions customary for similar transactions. The representations, warranties and covenants contained in each Purchase Agreement were made solely for the benefit of the applicable parties to the applicable Purchase Agreement and may be subject to limitations agreed upon by the applicable contracting parties. Among other covenants, each Purchase Agreement requires the Company to hold a meeting of its stockholders not later than August 1, 2024, to seek approval (the “Stockholder Approval”) (i) under Nasdaq Stock Market Rule 5635(d) for the issuance of shares of Common Stock in excess of 19.99% of the Company’s issued and outstanding shares of Common Stock at prices below the “Minimum Price” (as defined in Rule 5635 of the Rules of the Nasdaq Stock Market) on the date of the applicable Purchase Agreement pursuant to the terms of the applicable Preferred Stock and the applicable Warrants, and (ii) to increase the number of authorized shares of the Company to ensure that the number of authorized shares of Common Stock is sufficient to meet the Required Reserve Amount (as defined in the Purchase Agreements) pursuant to the terms of each Purchase Agreement.

In connection with the Private Placements, pursuant to (A) an engagement letter (the “GPN Agreement”) with GP Nurmenkari Inc. (“GPN”) and (B) an engagement letter (the “Palladium Agreement,” and collectively with the GPN Agreement, the “Engagement Letters”) with Palladium Capital Group, LLC (“Palladium,” and collectively with GPN, the “Placement Agents”), the Company engaged the Placement Agents to act as non-exclusive placement agents in connection with each Private Placement, pursuant to which, the Company agreed to (i) pay the Placement Agents a cash fee equal to 3% of the gross proceeds of each Private Placement (including any cash proceeds realized by the Company from the exercise of the Series F Warrants (as defined herein)), (ii) reimbursement and payment of certain expenses, and (iii) issue to the Placement Agents on the Closing Date, warrants to purchase up to an aggregate number of shares of Common Stock equal to 3% of the aggregate number of shares of Common Stock underlying the securities issued in each Private Placement, including upon exercise of any Series F Warrants, with terms identical to the Series G Long-Term Warrants and Series F-1 Long-Term Warrants.

Series G Preferred Stock

The terms of the Series G Preferred Stock are as set forth in the form of the Series G Certificate of Designations, attached hereto as Exhibit 3.1 to this Current Report on Form 8-K (the “Series G Certificate of Designations”), which will be filed with the Secretary of State for the State of Delaware prior to the closing of the Series G Private Placement. The shares of Series G Preferred Stock shall rank (i) *pari passu* to shares of the Series F-1 Preferred Stock and (ii) junior to shares of Series F Preferred Stock (as defined herein) issued and outstanding pursuant to the Series F Certificate of Designations (as defined herein), in each case, with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company. The Series G Preferred Stock will be convertible into shares of Common Stock (the “Series G Conversion Shares”) at the election of the holder at any time at an initial conversion price of \$1.816 per share (the “Series G Conversion Price”). The Series G Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series G Conversion Price (subject to certain exceptions). At any time after the issuance date of the Series G Preferred Stock, the Company has the option to redeem in cash all or any portion of the shares of Series G Preferred Stock then outstanding at a premium upon notice by the Company to all holders of the Series G Preferred Stock.

The holders of the Series G Preferred Stock will be entitled to dividends of 10% per annum, compounded monthly, which will be payable in arrears monthly in cash or “in kind” in the form of additional shares of Series G Preferred Stock at the holder’s option, in accordance with the terms of the Series G Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series G Certificate of Designations), the Series G Preferred Stock will accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Series G Preferred Stock are also entitled to receive a dividend make-whole payment. The holders of the Series G Preferred Stock will be entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series G Preferred Stock is entitled to be calculated assuming a conversion price of \$2.253 per share, which was the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the Series G Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series G Certificate of Designations.

Notwithstanding the foregoing, the Company’s ability to settle conversions and make dividend make-whole payments using shares of Common Stock is subject to certain limitations set forth in the Series G Certificate of Designations, including a limit on the number of shares that may be issued until the time, if any, that the Company has obtained the Stockholder Approval. Further, the Series G Certificate of Designations contains a certain beneficial ownership limitation, which applies to each Series G Investor other than PharmaCyte Biotech, Inc., after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Series G Preferred Stock or as part of any dividend make-whole payment under the Series G Certificate of Designations.

The Series G Certificate of Designations includes certain Triggering Events, including, among other things, the Company’s failure to pay any amounts due to the holders of the Series G Preferred Stock when due. In connection with a Triggering Event, each holder of Series G Preferred Stock will be able to require the Company to redeem in cash any or all of the holder’s Series G Preferred Stock at a premium set forth in the Series G Certificate of Designations.

The Company will be subject to certain affirmative and negative covenants regarding the incurrence of indebtedness, the existence of liens, the repayment of indebtedness, the payment of cash in respect of dividends (other than dividends pursuant to the Series G Certificate of Designations, the Series F-1 Certificate of Designations and the Series F Certificate of Designations), distributions or redemptions, and the transfer of assets, among other matters.

There is no established public trading market for the Series G Preferred Stock and the Company does not intend to list the Series G Preferred Stock on any national securities exchange or nationally recognized trading system.

Series F-1 Preferred Stock

The terms of the Series F-1 Preferred Stock are as set forth in the form of Series F-1 Certificate of Designations, attached hereto as Exhibit 3.2 to this Current Report on Form 8-K (the “Series F-1 Certificate of Designations”), which will be filed with the Secretary of State for the State of Delaware prior to the closing of the Series F-1 Private Placement. The shares of Series F-1 Preferred Stock shall rank (i) *pari passu* to shares of Series G Preferred Stock and (ii) junior to shares of the Series F Preferred Stock issued and outstanding pursuant to the Series F Certificate of Designations, in each case, with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company. The Series F-1 Preferred Stock will be convertible into shares of Common Stock (the “Series F-1 Conversion Shares”) at the election of the holder at any time at an initial conversion price of \$1.816 per share (the “Series F-1 Conversion Price”). The Series F-1 Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or

securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series F-1 Conversion Price (subject to certain exceptions). The Company will be required to redeem the Series F-1 Preferred Stock in eight (8) equal monthly installments, commencing on October 1, 2024. The amortization payments due upon such redemption are payable, at the Company's election, in cash at 105% of the applicable Installment Redemption Amount (as defined in the Series F-1 Certificate of Designations), or subject to certain limitations, in shares of Common Stock valued at the lower of (i) the Series F-1 Conversion Price then in effect and (ii) the greater of (A) 80% of the average of the three lowest closing prices of the Company's Common Stock during the thirty consecutive trading day period ending and including the trading day immediately prior to the date the amortization payment is due or (B) the Floor Price (as defined in the Series F-1 Certificate of Designations), and in each case subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events. The Company may require holders to convert their Series F-1 Preferred Stock into Series F-1 Conversion Shares if (i) the closing price of the Common Stock equals or exceeds \$5.448 per share (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) for 20 consecutive trading days, (ii) the daily dollar trading volume of the Common Stock exceeds three million dollars (\$3,000,000) per trading day during the same period, and (iii) certain equity conditions described in the Series F-1 Certificate of Designation are satisfied on each trading day during the same period.

The holders of the Series F-1 Preferred Stock will be entitled to dividends of 10% per annum, compounded monthly, which will be payable in arrears monthly in cash or shares of Common Stock at the Company's option, in accordance with the terms of the Series F-1 Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series F-1 Certificate of Designations), the Series F-1 Preferred Stock will accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Series F-1 Preferred Stock are also entitled to receive a dividend make-whole payment. The holders of the Series F-1 Preferred Stock will be entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series F-1 Preferred Stock is entitled to be calculated assuming a conversion price of \$2.253 per share, which was the Minimum Price (as defined in Rule 5635 of the Rules of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the Series F-1 Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series F-1 Certificate of Designations.

Notwithstanding the foregoing, the Company's ability to settle conversions and make amortization and dividend make-whole payments using shares of Common Stock is subject to certain limitations set forth in the Series F-1 Certificate of Designations, including a limit on the number of shares that may be issued until the time, if any, that the Company has obtained the Stockholder Approval. Further, the Series F-1 Certificate of Designations contains a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Series F-1 Preferred Stock or as part of any amortization payment or dividend make-whole payment under the Series F-1 Certificate of Designations.

The Series F-1 Certificate of Designations includes certain Triggering Events, including, among other things, the Company's failure to pay any amounts due to the holders of the Series F-1 Preferred Stock when due. In connection with a Triggering Event, each holder of Series F-1 Preferred Stock will be able to require the Company to redeem in cash any or all of the holder's Series F-1 Preferred Stock at a premium set forth in the Series F-1 Certificate of Designations.

The Company will be subject to certain affirmative and negative covenants regarding the incurrence of indebtedness, the existence of liens, the repayment of indebtedness, the payment of cash in respect of dividends (other than dividends pursuant to the Series F-1 Certificate of Designations, the Series G Certificate of Designations and the Series F Certificate of Designations), distributions or redemptions, and the transfer of assets, among other matters.

There is no established public trading market for the Series F-1 Preferred Stock and the Company does not intend to list the Series F-1 Preferred Stock on any national securities exchange or nationally recognized trading system.

Series G Warrants

The Series G Long-Term Warrants are exercisable for shares of Common Stock immediately, at an exercise price of \$1.816 per share and expire five years from the date of issuance. The Series G Short-Term Warrants are exercisable for shares of Common Stock immediately, at an exercise price of \$1.816 per share and expire eighteen months from the date of issuance. The exercise price of each Series G Warrant is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable exercise price (subject to certain exceptions). There is no established public trading market for the Series G Warrants and the Company does not intend to list the Series G Warrants on any national securities exchange or nationally recognized trading system. The shares of Common Stock issuable upon exercise of Series G Warrants are herein referred to as "Series G Warrant Shares."

Series F-1 Warrants

The Series F-1 Long-Term Warrants are exercisable for shares of Common Stock immediately, at an exercise price of \$1.816 per share and expire five years from the date of issuance. The Series F-1 Short-Term Warrants are exercisable for shares of Common Stock immediately, at an exercise price of \$1.816 per share and expire eighteen months from the date of issuance. The exercise price of each Series F-1 Warrant is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable exercise price (subject to certain exceptions). There is no established public trading market for the Series F-1 Warrants and the Company does not intend to list the Series F-1 Warrants on any national securities exchange or nationally recognized trading system. The shares of Common Stock issuable upon exercise of Series F-1 Warrants are herein referred to as "Series F-1 Warrant Shares."

Series G Registration Rights

The Series G Preferred Stock, the Series G Conversion Shares, the Series G Warrants and the Series G Warrant Shares have not been registered under the Securities Act. In connection with the Series G Purchase Agreement, the Company and the Series G Investors entered into a Registration Rights Agreement (the "Series G Registration Rights Agreement"), pursuant to which the Company will be required to file a resale registration statement (the "Series G Registration Statement") with the Securities and Exchange Commission (the "SEC") to register for resale 200% of the Series G Conversion Shares and the Series G Warrant Shares promptly following the Closing Date, but in no event later than 30 calendar days after the Closing Date, and to have such Series G Registration Statement declared effective by the Effectiveness Deadline (as defined in the Series G Registration Rights Agreement).

Series F-1 Registration Rights

The Series F-1 Preferred Stock, the Series F-1 Conversion Shares, the Series F-1 Warrants and the Series F-1 Warrant Shares have not been registered under the Securities Act. In connection with the Series F-1 Purchase Agreement, the Company and the Series F-1 Investors entered into a Registration Rights Agreement (the "Series F-1 Registration Rights Agreement"), pursuant to which the Company will be required to file a resale registration statement (the "Series F-1 Registration Statement") with the SEC to register for resale 200% of the Series F-1 Conversion Shares and the Series F-1 Warrant Shares promptly following the Closing Date, but in no event later than 30 calendar days after the Closing Date, and to have such Series F-1 Registration Statement declared effective by the Effectiveness Deadline (as defined in the Series F-1 Registration Rights Agreement). The Company will be obligated to pay certain liquidated damages to the Series F-1 Investors if the Company fails to file the Series F-1 Registration Statement when required, fails to cause the Series F-1 Registration Statement to be declared effective by the SEC when required, or fails to maintain the effectiveness of the Series F-1 Registration Statement pursuant to the terms of the Series F-1 Registration Rights Agreement.

Waiver, Consent, Notice and Amendment and Certificate of Amendment

As previously disclosed, on February 21, 2023, the Company entered into a Securities Purchase Agreement (the “Series F Purchase Agreement”) with certain accredited investors (the “Series F Holders”) pursuant to which it agreed to sell to the Series F Holders (i) shares of the Company’s Series F Convertible Preferred Stock, with a par value of \$0.001 per share and a stated value of \$1,000 per share (the “Series F Preferred Stock”), and (ii) warrants to purchase shares of Common Stock, subject to adjustment (the “Series F Warrants”). The terms of the Series F Preferred Stock are as set forth in the Amended and Restated Certificate of Designations of the Series F Preferred Stock (the “Series F Certificate of Designations”) filed with the Secretary of State of the State of Delaware on April 8, 2024.

On May 20, 2024, the Company entered into an Omnibus Waiver, Consent, Notice and Amendment (the “Series F Agreement”) with the Required Holders (as defined in the Series F Certificate of Designations). Pursuant to the Series F Agreement, the Required Holders agreed to (i) amend the Series F Purchase Agreement to amend certain terms relating to purchase rights thereunder, (ii) waive certain rights under the Series F Purchase Agreement and Series F Certificate of Designations in respect of the issuance of the Preferred Stock and entrance by the Company into the Purchase Agreements, (iii) waive the requirement that the Company reserve for issuance a sufficient number of shares of Common Stock as required by the Series F Certificate of Designations, the Series F Purchase Agreement and Series F Warrants, until such time as the Company obtains the Stockholder Approval, and (iv) consent to the issuance of the Preferred Stock, as required pursuant to certain terms of the Series F Certificate of Designations, the Series F Purchase Agreement and the Series F Warrants, as applicable.

The Company and the Required Holders further agreed pursuant to the Series F Agreement to amend the Series F Certificate of Designations by filing a Certificate of Amendment to the Series F Certificate of Designations (the “Certificate of Amendment”) with the Secretary of State of the State of Delaware. The Certificate of Amendment amends the Series F Certificate of Designations to (i) extend the maturity date to December 31, 2024, (ii) permit and modify certain procedures related to the payment of installment amounts with respect to the Installment Dates (as defined in the Series F Certificate of Designations) falling between (and including) July 1, 2024, and (and including) August 1, 2024, thereunder, and (iii) modify the schedule of Installment Dates.

The foregoing descriptions of the Series G Purchase Agreement, Series F-1 Purchase Agreement, the Series G Certificate of Designations, the Series F-1 Certificate of Designations, the Series G Long-Term Warrant, the Series G Short-Term Warrant, the Series F-1 Long-Term Warrant, the Series F-1 Short-Term Warrant, the Series G Registration Rights Agreement, the Series F-1 Registration Rights Agreement, the Series F Agreement and the Certificate of Amendment, do not purport to be complete and are qualified in their entirety by reference to the full text of such documents, forms of which are filed as Exhibits 10.1, 10.2, 3.1, 3.2, 4.1, 4.2, 4.3, 4.4, 10.3, 10.4, 10.5 and 3.3, respectively, to this Current Report on Form 8-K and incorporated herein by reference.

Item 3.02 Unregistered Sales of Equity Securities

The matters described in Item 1.01 of this Current Report on Form 8-K related to the Private Placements are incorporated herein by reference. In connection with the issuance of the Preferred Stock and Warrants in each applicable Private Placement described in Item 1.01, the Company relied upon the exemption from registration provided by Section 4(a)(2) of the Securities Act and Regulation D promulgated thereunder for transactions not involving a public offering.

This report shall not constitute an offer to sell or a solicitation of an offer to buy nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or jurisdiction.

Item 3.03 Material Modification to Rights of Security Holders.

The matters described in Item 1.01 of this Current Report on Form 8-K related to the Certificate of Amendment are incorporated herein by reference.

Item 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.

The matters described in Item 1.01 of this Current Report on Form 8-K related to the filing of the Series G Certificate of Designations, Series F-1 Certificate of Designations and the Certificate of Amendment are incorporated herein by reference.

Item 8.01 Other Events.

Series F Adjustments

The Series F Preferred Stock and the Series F Warrants contain a conversion price and an exercise price, as applicable, adjustment mechanism providing that certain issuances of common stock (or common stock equivalents), including issuances as a result of the Private Placements, if made at a price lower than the existing conversion price or exercise price, as applicable, of such Series F Preferred Stock and Series F Warrants, would reset the conversion price and exercise price, as applicable, to such lower price. As a result of the Private Placements, the conversion price and exercise price, as applicable, of the Series F Preferred Stock and Series F Warrants have been automatically reset as of the Closing Date to \$1.816.

Press Release

On May 21, 2024, the Company issued a press release announcing the Private Placements. A copy of the press release is attached as Exhibit 99.1 hereto.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit	Description
3.1	Form of Certificate of Designations of Series G Convertible Preferred Stock.
3.2	Form of Certificate of Designations of Series F-1 Convertible Preferred Stock.
3.3	Certificate of Amendment of Amended and Restated Certificate of Designations of Series F Convertible Preferred Stock of MyMD Pharmaceuticals, Inc.
4.1	Form of Series G Long-Term Warrant.
4.2	Form of Series G Short-Term Warrant.
4.3	Form of Series F-1 Long-Term Warrant.
4.4	Form of Series F-1 Short-Term Warrant.
10.1*	Form of Series G Purchase Agreement.
10.2*	Form of Series F-1 Purchase Agreement.
10.3	Form of Series G Registration Rights Agreement.
10.4	Form of Series F-1 Registration Rights Agreement.
10.5*	Form of Omnibus Waiver, Consent, Notice and Amendment, by and among MyMD Pharmaceuticals, Inc. and the investors party thereto.
99.1	Press Release, dated May 21, 2024.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Certain of the schedules (and similar attachments) to this exhibit have been omitted in accordance with Item 601(a)(5) of Regulation S-K under the Securities Act because they do not contain information material to an investment or voting decision and that information is not otherwise disclosed in the exhibit or the disclosure document. The registrant hereby agrees to furnish a copy of all omitted schedules (or similar attachments) to the SEC upon its request.

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.

MYMD PHARMACEUTICALS, INC.

Date: May 21, 2024

By: /s/ Christopher Chapman, M.D.

Name: Christopher Chapman, M.D

Title: President and Chief Medical Officer

**CERTIFICATE OF DESIGNATIONS OF
SERIES G CONVERTIBLE PREFERRED STOCK OF
MyMD PHARMACEUTICALS, INC.**

I, Christopher Chapman, M.D., hereby certify that I am the President of MyMD Pharmaceuticals, Inc. (the “**Company**”), a corporation organized and existing under the Delaware General Corporation Law (the “**DGCL**”), and further do hereby certify:

That pursuant to the authority expressly conferred upon the Board of Directors of the Company (the “**Board**”) by the Company’s Certificate of Incorporation (the “**Certificate of Incorporation**”), and Section 151(g) of the DGCL, on May 20, 2024, the Board adopted the following resolution determining it desirable and in the best interests of the Company and its stockholders for the Company to create a series of eight thousand nine hundred fifty (8,950) shares of preferred stock designated as “**Series G Convertible Preferred Stock**”, none of which shares have been issued:

RESOLVED, that pursuant to the authority vested in the Board, in accordance with the provisions of the Certificate of Incorporation, a series of preferred stock, par value \$0.001 per share, of the Company be and hereby is created, and that the designation and number of shares thereof and the voting and other powers, preferences and relative, participating, optional or other rights of the shares of such series and the qualifications, limitations and restrictions thereof are as follows:

TERMS OF SERIES G CONVERTIBLE PREFERRED STOCK

1. Designation and Number of Shares. There shall hereby be created and established a series of preferred stock of the Company designated as “Series G Convertible Preferred Stock” (the “**Preferred Shares**”). The authorized number of Preferred Shares shall be eight thousand nine hundred fifty (8,950). Each Preferred Share shall have a par value equal to \$0.001 per share. Capitalized terms not defined herein shall have the meaning as set forth in Section 33 below.

2. Ranking. Except to the extent that the holders of at least a majority of the outstanding Preferred Shares (the “**Required Holders**”) expressly consent to the creation of Senior Preferred Stock (as defined below) in accordance with Section 18, all shares of capital stock of the Company shall be pari passu (the “**Parity Stock**”) or junior (the “**Junior Stock**”) in rank to all Preferred Shares with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company. The rights of all such shares of capital stock of the Company shall be subject to the rights, powers, preferences and privileges of the Preferred Shares. Without limiting any other provision of this Certificate of Designations, without the prior express consent of the Required Holders, voting separately as a single class, the Company shall not hereafter authorize or issue any additional or other shares of capital stock that are (i) of senior rank to the Preferred Shares in respect of the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company (collectively, the “**Senior Preferred Stock**”), until the date on which at least 80% of the Preferred Shares have been converted to Common Stock, or (ii) Parity Stock or Junior Stock having a maturity date or any other date requiring redemption or repayment of such shares of Parity Stock or Junior Stock that is prior to the conversion of all the Preferred Shares. Notwithstanding the foregoing, the Company’s issuance of the Series F-1 Convertible Preferred Stock, par value \$0.001 per share (the “**Series F-1 Preferred Stock**”), pursuant to that certain Certificate of Designations establishing the rights, preferences, restrictions and other matters relating to the Series F-1 Preferred Stock, shall not require the consent of the Required Holders pursuant to this Section 2. Further to the foregoing, the Preferred Shares shall rank (i) pari passu to such shares of Series F-1 Preferred Stock and (ii) junior to shares of Series F Convertible Preferred Stock, par value \$0.001 per share, issued and outstanding pursuant to that certain Amended and Restated Certificate of Designations establishing the rights, preferences, restrictions and other matters relating to the Series F Convertible Preferred Stock, in each case of clauses (i) and (ii), with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company. In the event of the merger or consolidation of the Company with or into another corporation, the Preferred Shares shall maintain their relative rights, powers, designations, privileges and preferences provided for herein and no such merger or consolidation shall be consummated if it would result in the Preferred Shares being treated in any manner inconsistently with the foregoing.

3. Dividends and Payments.

(a) From and after the first date of issuance of any Preferred Shares (the “**Initial Issuance Date**”), each holder of a Preferred Share (each, a “**Holder**” and collectively, the “**Holders**”) shall be entitled to receive dividends on the Stated Value of the Preferred Shares (“**Dividends**”) at the Dividend Rate computed on the basis of a 360-day year and twelve 30-day months and shall be payable in arrears monthly on each Dividend Date and shall compound each calendar month. At the Holder’s sole discretion, dividends may be paid either (i) in cash, from funds legally available therefor, or (ii) “in kind” in the form of additional Preferred Shares (the “**PIK Preferred Shares**”) and Conversion Shares issuable upon conversion of such PIK Preferred Shares, the “**PIK Conversion Shares**”), with each such payment of a Dividend “in kind” payable in the number of PIK Preferred Shares as shall equal the quotient of the (A) Dividend payable on such Dividend Date and (B) the arithmetic average of Closing Sale Prices of the shares of Common Stock on the Principal Market for each of the five (5) Trading Days before the applicable Dividend Payment Date (as defined herein); provided that such price shall not be lower than the Floor Price.

(b) Prior to the payment of Dividends on a Dividend Date, Dividends shall be payable by way of inclusion of the Dividends in the Conversion Amount on each Conversion Date in accordance with Section 4(b)(i) or upon any redemption in accordance with Section 12 or any required payment upon any Triggering Event. From and after the occurrence and during the continuance of any Triggering Event, Dividends shall accrue on the Stated Value each Preferred Share at fifteen percent (15.0%) per annum (the “**Default Rate**”) and shall be computed on the basis of a 360-day year and twelve 30-day months.

4. Conversion. At any time after the Initial Issuance Date, each Preferred Share shall be convertible into validly issued, fully paid and non-assessable shares of Common Stock (as defined below), on the terms and conditions set forth in this Section 4.

(a) Holder’s Conversion Right. Subject to the provisions of Section 4(d), at any time or times on or after the Initial Issuance Date, each Holder shall be entitled to convert any portion of the outstanding Preferred Shares held by such Holder into validly issued, fully paid and non-assessable shares of Common Stock in accordance with Section 4(c) at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Transfer Agent (as defined below)) that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Preferred Shares.

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(b) Conversion Rate. The number of shares of Common Stock issuable upon conversion of any Preferred Share pursuant to Section 4(a) shall be determined by dividing (x) the Conversion Amount of such Preferred Share by (y) the Conversion Price (the “**Conversion Rate**”):

(i) “**Conversion Amount**” means, with respect to each Preferred Share, as of the applicable date of determination, the sum of (1) the Stated Value thereof plus (2) the Make-Whole Amount, (3) the Additional Amount thereon and any accrued and unpaid Late Charges (as defined below in Section 26(c)) with respect to such Stated Value and Additional Amount as of such date of determination.

(ii) “**Conversion Price**” means, with respect to each Preferred Share, as of any Conversion Date or other date of determination, \$1.816, subject to

adjustment as provided herein.

(c) Mechanics of Conversion. The conversion of each Preferred Share shall be conducted in the following manner:

(i) Optional Conversion. To convert a Preferred Share into shares of Common Stock on any date (a “**Conversion Date**”), a Holder shall deliver (whether via electronic mail or otherwise), for receipt on or prior to 11:59 p.m., New York time, on such date, a copy of an executed notice of conversion of the share(s) of Preferred Shares subject to such conversion in the form attached hereto as **Exhibit I** (the “**Conversion Notice**”) to the Company. If required by Section 4(c)(iii), within two (2) Trading Days following a conversion of any such Preferred Shares as aforesaid, such Holder shall surrender to a nationally recognized overnight delivery service for delivery to the Company the original certificates, if any, representing the Preferred Shares (the “**Preferred Share Certificates**”) so converted as aforesaid (or an indemnification undertaking with respect to the Preferred Shares in the case of its loss, theft or destruction as contemplated by Section 20(b)). On or before the first (1st) Trading Day following the date of receipt of a Conversion Notice, the Company shall transmit by electronic mail an acknowledgment of confirmation, in the form attached hereto as **Exhibit II**, of receipt of such Conversion Notice to such Holder and the Company’s transfer agent (the “**Transfer Agent**”), which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein. On or before the first (1st) Trading Day following each date on which the Company has received a Conversion Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade initiated on the applicable Conversion Date of such shares of Common Stock issuable pursuant to such Conversion Notice) (the “**Share Delivery Deadline**”), the Company shall (1) provided that the Transfer Agent is participating in The Depository Trust Company’s (“**DTC**”) Fast Automated Securities Transfer Program (“**FAST**”), credit such aggregate number of shares of Common Stock to which such Holder shall be entitled pursuant to such conversion to such Holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal at Custodian system, or (2) if the Transfer Agent is not participating in FAST, upon the request of such Holder, issue and deliver (via reputable overnight courier) to the address as specified in such Conversion Notice, a certificate, registered in the name of such Holder or its designee, for the number of shares of Common Stock to which such Holder shall be entitled. If the number of Preferred Shares represented by the Preferred Share Certificate(s) submitted for conversion pursuant to Section 4(c)(iii) is greater than the number of Preferred Shares being converted, then the Company shall, as soon as practicable and in no event later than one (1) Trading Day after receipt of the Preferred Share Certificate(s) and at its own expense, issue and deliver to such Holder (or its designee) a new Preferred Share Certificate or a new Book-Entry (in either case, accordance with Section 20(d)) representing the number of Preferred Shares not converted. The Person or Persons entitled to receive the shares of Common Stock issuable upon a conversion of Preferred Shares shall be treated for all purposes as the record holder or holders of such shares of Common Stock on the Conversion Date. Notwithstanding the foregoing, with respect to any Conversion Notice delivered by a Buyer (as defined in the Securities Purchase Agreement) to the Company on or prior to 4:00 p.m. (New York City time) on the Trading Day immediately prior to the date of initial issuance of such applicable Preferred Shares to be converted pursuant to such Conversion Notice (each, an “**Issuance Date**”), which may be delivered at any time after the time of execution of the Securities Purchase Agreement, the Company agrees to deliver the shares of Common Stock issuable upon conversion of such Preferred Shares to be issued on such date subject to such notice(s) by 4:00 p.m. (New York City time) on such applicable Issuance Date and such Issuance Date shall be the Share Delivery Date for purposes hereunder with respect to such Conversion Notice.

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(ii) Company’s Failure to Timely Convert. If the Company shall fail, for any reason or for no reason, on or prior to the applicable Share Delivery Deadline, if the Transfer Agent is not participating in FAST, to issue and deliver to such Holder (or its designee) a certificate for the number of shares of Common Stock to which such Holder is entitled and register such shares of Common Stock on the Company’s share register or, if the Transfer Agent is participating in FAST, to credit such Holder’s or its designee’s balance account with DTC for such number of shares of Common Stock to which such Holder is entitled upon such Holder’s conversion of any Conversion Amount (as the case may be) (a “**Conversion Failure**”), then, in addition to all other remedies available to such Holder, (X) the Company shall pay in cash from funds legally available therefor to such Holder on each day after the Share Delivery Deadline that the issuance of such shares of Common Stock is not timely effected an amount equal to 1% of the product of (A) the sum of the number of shares of Common Stock not issued to such Holder on or prior to the Share Delivery Deadline and to which such Holder is entitled, multiplied by (B) any trading price of the Common Stock selected by such Holder in writing as in effect at any time during the period beginning on the applicable Conversion Date and ending on the applicable Share Delivery Deadline, and (Y) such Holder, upon written notice to the Company, may void its Conversion Notice with respect to, and retain or have returned, as the case may be, all, or any portion, of such Preferred Shares that has not been converted pursuant to such Conversion Notice; provided that the voiding of a Conversion Notice shall not affect the Company’s obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 4(c)(ii) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Deadline the Transfer Agent is not participating in FAST, the Company shall fail to issue and deliver to such Holder (or its designee) a certificate and register such shares of Common Stock on the Company’s share register or, if the Transfer Agent is participating in FAST, the Transfer Agent shall fail to credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of shares of Common Stock to which such Holder is entitled upon such Holder’s conversion hereunder or pursuant to the Company’s obligation pursuant to clause (ii) below, and if on or after such Share Delivery Deadline such Holder acquires (in an open market transaction, stock loan or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such conversion that such Holder is entitled to receive from the Company and has not received from the Company in connection with such Conversion Failure (a “**Buy-In**”), then, in addition to all other remedies available to such Holder, the Company shall, within two (2) Business Days after receipt of such Holder’s request and in such Holder’s discretion, either: (I) pay cash from funds legally available therefor to such Holder in an amount equal to such Holder’s total purchase price (including brokerage commission, stock loan costs and other out-of-pocket expenses, if any) for the shares of Common Stock so acquired (including, without limitation, by any other Person in respect, or on behalf, of such Holder) (the “**Buy-In Price**”), at which point the Company’s obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit to the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of shares of Common Stock to which such Holder is entitled upon such Holder’s conversion hereunder (as the case may be) (and to issue such shares of Common Stock) shall terminate, or (II) promptly honor its obligation to so issue and deliver to such Holder a certificate or certificates representing such shares of Common Stock or credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of shares of Common Stock to which such Holder is entitled upon such Holder’s conversion hereunder (as the case may be) and pay cash from funds legally available therefor to such Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (x) such number of shares of Common Stock multiplied by (y) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Conversion Notice and ending on the date of such issuance and payment under this clause (II). Nothing herein shall limit a Holder’s right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the conversion of the Preferred Shares as required pursuant to the terms hereof. Notwithstanding anything herein to the contrary, with respect to any given Conversion Failure, this Section 4(c)(ii) shall not apply to a Holder to the extent the Company has already paid such amounts in full to such Holder with respect to such Conversion Failure, as applicable, pursuant to the analogous sections of the Securities Purchase Agreement.

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(iii) Registration: Book-Entry. At the time of issuance of any Preferred Shares hereunder, the applicable Holder may, by written request (including by electronic-mail) to the Company, elect to receive such Preferred Shares in the form of one or more Preferred Share Certificates or in Book-Entry form. The Company (or the Transfer Agent, as custodian for the Preferred Shares) shall maintain a register (the “**Register**”) for the recordation of the names and addresses of the Holders of each Preferred Share and the Stated Value of the Preferred Shares and whether the Preferred Shares are held by such Holder in Preferred Share Certificates or in Book-Entry form (the “**Registered Preferred Shares**”). The entries in the Register shall be conclusive and binding for all purposes absent manifest error. The Company and each Holder of the Preferred Shares shall treat each Person whose name is recorded in the Register as the owner of a Preferred Share for all purposes (including, without limitation, the right to receive payments and Dividends hereunder) notwithstanding notice to the contrary. A Registered Preferred Share may be assigned, transferred or sold only by registration of such assignment or sale on the Register. Upon its receipt of a written request to assign, transfer or sell one or more Registered Preferred Shares by such Holder thereof, the Company shall record the information contained therein in the Register and issue one or more new Registered Preferred Shares in the same aggregate Stated Value as the Stated Value of the surrendered Registered Preferred Shares to the designated assignee or transferee pursuant to Section 20, provided that if the Company does not so record an assignment, transfer or sale (as the case may be) of such Registered Preferred Shares within two (2) Business Days of such a request, then the Register shall be automatically deemed updated to reflect such assignment, transfer or sale (as the case may be). Notwithstanding anything to the contrary set forth in this Section 4, following conversion of any Preferred Shares in accordance with the terms hereof, the applicable Holder shall not be required to physically surrender such Preferred Shares held in the form of a

Preferred Share Certificate to the Company unless (A) the full or remaining number of Preferred Shares represented by the applicable Preferred Share Certificate are being converted (in which event such certificate(s) shall be delivered to the Company as contemplated by this Section 4(c)(iii)) or (B) such Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of Preferred Shares upon physical surrender of the applicable Preferred Share Certificate. Each Holder and the Company shall maintain records showing the Stated Value, Dividends and Late Charges converted and/or paid (as the case may be) and the dates of such conversions and/or payments (as the case may be) or shall use such other method, reasonably satisfactory to such Holder and the Company, so as not to require physical surrender of a Preferred Share Certificate upon conversion. If the Company does not update the Register to record such Stated Value, Dividends and Late Charges converted and/or paid (as the case may be) and the dates of such conversions and/or payments (as the case may be) within two (2) Business Days of such occurrence, then the Register shall be automatically deemed updated to reflect such occurrence. In the event of any dispute or discrepancy, such records of such Holder establishing the number of Preferred Shares to which the record holder is entitled shall be controlling and determinative in the absence of manifest error. A Holder and any transferee or assignee, by acceptance of a certificate, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of any Preferred Shares, the number of Preferred Shares represented by such certificate may be less than the number of Preferred Shares stated on the face thereof. Each Preferred Share Certificate shall bear the following legend:

ANY TRANSFEREE OR ASSIGNEE OF THIS CERTIFICATE SHOULD CAREFULLY REVIEW THE TERMS OF THE COMPANY'S CERTIFICATE OF DESIGNATIONS RELATING TO THE SHARES OF SERIES G PREFERRED STOCK REPRESENTED BY THIS CERTIFICATE, INCLUDING SECTION 4(c)(iii) THEREOF. THE NUMBER OF SHARES OF SERIES G PREFERRED STOCK REPRESENTED BY THIS CERTIFICATE MAY BE LESS THAN THE NUMBER OF SHARES OF SERIES G PREFERRED STOCK STATED ON THE FACE HEREOF PURSUANT TO SECTION 4(c)(iii) OF THE CERTIFICATE OF DESIGNATIONS RELATING TO THE SHARES OF SERIES G PREFERRED STOCK REPRESENTED BY THIS CERTIFICATE.

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(iv) Pro Rata Conversion; Disputes. In the event that the Company receives a Conversion Notice from more than one Holder for the same Conversion Date and the Company can convert some, but not all, of such Preferred Shares submitted for conversion, the Company shall convert from each Holder electing to have Preferred Shares converted on such date a pro rata amount of such Holder's Preferred Shares submitted for conversion on such date based on the number of Preferred Shares submitted for conversion on such date by such Holder relative to the aggregate number of Preferred Shares submitted for conversion on such date. In the event of a dispute as to the number of shares of Common Stock issuable to a Holder in connection with a conversion of Preferred Shares, the Company shall issue to such Holder the number of shares of Common Stock not in dispute and resolve such dispute in accordance with Section 25.

(d) Limitation on Beneficial Ownership.

(i) Beneficial Ownership. The Company shall not effect the conversion of any of the Preferred Shares held by a Holder (other than PharmaCyte Biotech, Inc. ("PharmaCyte")), and such Holder shall not have the right to convert any of the Preferred Shares held by such Holder pursuant to the terms and conditions of this Certificate of Designations and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, such Holder together with the other Attribution Parties collectively would beneficially own in excess of [4.99][9.99]% (the "**Maximum Percentage**") of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by such Holder and the other Attribution Parties shall include the number of shares of Common Stock held by such Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon conversion of the Preferred Shares with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted Preferred Shares beneficially owned by such Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any convertible notes, convertible preferred stock or warrants, including the Preferred Shares and the Warrants) beneficially owned by such Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 4(d)(i). For purposes of this Section 4(d)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the 1934 Act. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder. For purposes of determining the number of outstanding shares of Common Stock a Holder may acquire upon the conversion of such Preferred Shares without exceeding the Maximum Percentage, such Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the "**Reported Outstanding Share Number**"). If the Company receives a Conversion Notice from a Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall notify such Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause such Holder's beneficial ownership, as determined pursuant to this Section 4(d)(i), to exceed the Maximum Percentage, such Holder must notify the Company of a reduced number of shares of Common Stock to be purchased pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of any Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including such Preferred Shares, by such Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to a Holder upon conversion of such Preferred Shares results in such Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which such Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and such Holder shall not have the power to vote or to transfer the Excess Shares. Upon delivery of a written notice to the Company, any Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage of such Holder to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to such Holder and the other Attribution Parties and not to any other Holder that is not an Attribution Party of such Holder. For purposes of clarity, the shares of Common Stock issuable to a Holder pursuant to the terms of this Certificate of Designations in excess of the Maximum Percentage shall not be deemed to be beneficially owned by such Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to convert such Preferred Shares pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of convertibility. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 4(d)(i) to the extent necessary to correct this paragraph (or any portion of this paragraph) which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 4(d)(i) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of such Preferred Shares. For the avoidance of doubt, this Section 4(d)(i) shall not apply to PharmaCyte or its transferees.

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(ii) Principal Market Regulation. The Company shall not issue any shares of Common Stock upon conversion of any Preferred Shares or otherwise pursuant to the terms of this Certificate of Designations if the issuance of such shares of Common Stock (taken together with the issuance of all other shares of Common Stock upon exercise of the Warrants) would exceed the aggregate number of shares of Common Stock which the Company may issue upon exercise or conversion (as the case may be) of the Preferred Shares and the Warrants without breaching the Company's obligations under the rules and regulations the listing rules of the Principal Market (the number of shares which may be issued without violating such rules and regulations, the "**Exchange Cap**"), except that such limitation shall not apply in the event that the Company (A) obtains the approval of its stockholders as required by the applicable rules and regulations of the Principal Market for issuances of shares of Common Stock in excess of such amount or (B) obtains a written opinion from outside counsel to the Company that such approval is not required, which opinion shall be reasonably satisfactory to the Required Holders. Until such approval or such written opinion is obtained, no Holder shall be issued in the aggregate, upon conversion or exercise (as the case may be) of any Preferred

Shares or any Warrant, shares of Common Stock in an amount greater than the product of (i) the Exchange Cap as of the Initial Issuance Date multiplied by (ii) the quotient of (1) the aggregate number of Preferred Shares issued to such Holder on the Initial Issuance Date divided by (2) the aggregate number of Preferred Shares issued to the Holders on the Initial Issuance Date (with respect to each Holder, the “**Exchange Cap Allocation**”). In the event that any Holder shall sell or otherwise transfer any of such Holder’s Preferred Shares, the transferee shall be allocated a pro rata portion of such Holder’s Exchange Cap Allocation with respect to such portion of such Preferred Shares so transferred, and the restrictions of the prior sentence shall apply to such transferee with respect to the portion of the Exchange Cap Allocation so allocated to such transferee. Upon conversion in full of a holder’s Preferred Shares, the difference (if any) between such holder’s Exchange Cap Allocation and the number of shares of Common Stock actually issued to such holder upon such holder’s conversion in full of such Preferred Shares shall be allocated, to the respective Exchange Cap Allocations of the remaining holders of Preferred Shares and/or related Warrants on a pro rata basis in proportion to the shares of Common Stock underlying the Preferred Shares and/or related Warrants then held by each such holder of Preferred Shares and/or related Warrants. In the event that after July 31, 2024, the Company is prohibited from issuing any shares of Common Stock pursuant to this Section 4(d)(ii) (the “**Exchange Cap Shares**”) to a Holder, the Company shall pay cash from funds legally available therefor to such Holder in exchange for the redemption of such number of Preferred Shares held by such Holder that are not convertible into such Exchange Cap Shares at a price equal to the sum of (i) the product of (x) such number of Exchange Cap Shares and (y) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date such Holder delivers the applicable Conversion Notice with respect to such Exchange Cap Shares to the Company and ending on the date of such issuance and payment under this Section 4(d)(ii) and (ii) to the extent such Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by such Holder of Exchange Cap Shares, any brokerage commissions and other out-of-pocket expenses, if any, of such Holder incurred in connection therewith.

5. Triggering Event Redemptions.

(a) Triggering Event. Each of the following events shall constitute a “**Triggering Event**” and each of the events in clauses (viii), (ix), and (x) shall constitute a “**Bankruptcy Triggering Event**”:

(i) the suspension from trading or the failure of the Common Stock to be trading or listed (as applicable) on an Eligible Market for a period of five (5) consecutive Trading Days;

(ii) the Company’s (A) failure to cure a Conversion Failure or a Delivery Failure (as defined in the Warrants) by delivery of the required number of shares of Common Stock within five (5) Trading Days after the applicable Conversion Date or exercise date (as the case may be) or (B) written notice to any holder of Preferred Shares or Warrants, including, without limitation, by way of public announcement or through any of its agents, at any time, of its intention not to comply, as required, with a request for exercise of any Warrants for Warrant Shares in accordance with the provisions of the Warrants or a request for conversion of any Preferred Shares into shares of Common Stock that is requested in accordance with the provisions of this Certificate of Designations, other than pursuant to Section 4(d) hereof;

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(iii) except to the extent the Company is in compliance with Section 11(b) below, following the Stockholder Approval Date (as defined in the Securities Purchase Agreement), at any time following the tenth (10th) consecutive day that a Holder’s Authorized Share Allocation (as defined in Section 11(a) below) is less than the sum of (A) 200% of the number of shares of Common Stock that such Holder would be entitled to receive upon a conversion, in full, of all of the Preferred Shares then held by such Holder (without regard to any limitations on conversion set forth in this Certificate of Designations) and (B) 200% of the number of shares of Common Stock that such Holder would then be entitled to receive upon exercise in full of such Holder’s Warrants (without regard to any limitations on exercise set forth in the Warrants);

(iv) subject to the applicable provisions of Section 170 of the DGCL, the Board fails to declare any Dividend to be paid on the applicable Dividend Date in accordance with Section 3;

(v) the Company’s failure to pay to any Holder any Dividend on any Dividend Date (whether or not declared by the Board) or any other amount when and as due under this Certificate of Designations (including, without limitation, the Company’s failure to pay any redemption payments or amounts hereunder), the Securities Purchase Agreement or any other Transaction Document or any other agreement, document, certificate or other instrument delivered in connection with the transactions contemplated hereby and thereby (in each case, whether or not permitted pursuant to the DGCL), except, in the case of a failure to pay Dividends and Late Charges when and as due, in each such case only if such failure remains uncured for a period of at least five (5) Trading Days;

(vi) the Company fails to deliver Conversion Shares or Warrant Shares without a restrictive legend on any certificate or any shares of Common Stock issued to the applicable Holder upon conversion or exercise (as the case may be) of any Securities (as defined in the Securities Purchase Agreement) acquired by such Holder under the Transaction Documents as and when required by such Securities or the Securities Purchase Agreement, as applicable, and any such failure remains uncured for at least five (5) Trading Days;

(vii) the occurrence of any default under, redemption of or acceleration prior to maturity of at least an aggregate of \$250,000 of Indebtedness (as defined in the Securities Purchase Agreement) of the Company or any of its Subsidiaries;

(viii) bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for the relief of debtors shall be instituted by or against the Company or any Subsidiary and, if instituted against the Company or any Subsidiary by a third party, shall not be dismissed within thirty (30) days of their initiation;

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(ix) the commencement by the Company or any Subsidiary of a voluntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree, order, judgment or other similar document in respect of the Company or any Subsidiary in an involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal, state or foreign law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the execution of a composition of debts, or the occurrence of any other similar federal, state or foreign proceeding, or the admission by it in writing of its inability to pay its debts generally as they become due, the taking of corporate action by the Company or any Subsidiary in furtherance of any such action or the taking of any action by any Person to commence a Uniform Commercial Code foreclosure sale or any other similar action under federal, state or foreign law;

(x) the entry by a court of (i) a decree, order, judgment or other similar document in respect of the Company or any Subsidiary of a voluntary or involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or (ii) a decree, order, judgment or other similar document adjudging the Company or any Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking liquidation, reorganization, arrangement, adjustment or composition of or in respect of the Company or any Subsidiary under any applicable federal, state or foreign law or (iii) a decree, order, judgment or other similar document appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree, order, judgment or other similar document or any such other decree, order, judgment or other similar document unstayed and in effect for a period of thirty (30) consecutive days;

(xi) a final judgment or judgments for the payment of money aggregating in excess of \$250,000 are rendered against the Company and/or any of its Subsidiaries and which judgments are not, within thirty (30) days after the entry thereof, bonded, discharged, settled or stayed pending appeal, or are not discharged within thirty

(30) days after the expiration of such stay; provided, however, any judgment which is covered by insurance or an indemnity from a credit worthy party shall not be included in calculating the \$250,000 amount set forth above so long as the Company provides each Holder a written statement from such insurer or indemnity provider (which written statement shall be reasonably satisfactory to each Holder) to the effect that such judgment is covered by insurance or an indemnity and the Company or such Subsidiary (as the case may be) will receive the proceeds of such insurance or indemnity within thirty (30) days of the issuance of such judgment;

(xii) the Company and/or any Subsidiary, individually or in the aggregate, either (i) fails to pay, when due, or within any applicable grace period, any payment with respect to any Indebtedness in excess of \$250,000 due to any third party (other than, with respect to unsecured Indebtedness only, payments contested by the Company and/or such Subsidiary (as the case may be) in good faith by proper proceedings and with respect to which adequate reserves have been set aside for the payment thereof in accordance with GAAP) or is otherwise in breach or violation of any agreement for monies owed or owing in an amount in excess of \$250,000, which breach or violation permits the other party thereto to declare a default or otherwise accelerate amounts due thereunder, or (ii) suffer to exist any other circumstance or event that would, with or without the passage of time or the giving of notice, result in a default or event of default under any agreement binding the Company or any Subsidiary, which default or event of default would or is likely to have a material adverse effect on the business, assets, operations (including results thereof), liabilities, properties, condition (including financial condition) or prospects of the Company or any of its Subsidiaries, individually or in the aggregate, but only if such failure or occurrence remains uncured for a period of at least five (5) days;

(xiii) other than as specifically set forth in another clause of this Section 5(a), the Company or any Subsidiary breaches any representation or warranty in any material respect (other than representations or warranties subject to material adverse effect or materiality, which may not be breached in any respect) or any covenant or other term or condition of any Transaction Document, except, in the case of a breach of a covenant or other term or condition that is curable, only if such breach remains uncured for a period of five (5) consecutive Trading Days;

(xiv) a false or inaccurate certification (including a false or inaccurate deemed certification) by the Company as to whether any Triggering Event has occurred;

(xv) any breach or failure in any respect by the Company or any Subsidiary to comply with any provision of Section 15(m) of this Certificate of Designations;

(xvi) any Material Adverse Effect (as defined in the Securities Purchase Agreement) occurs that has not been cured, if capable of curing, within ten (10) Trading Days of the occurrence thereof; or

(xvii) any provision of any Transaction Document shall at any time for any reason (other than pursuant to the express terms thereof) cease to be valid and binding on or enforceable against the Company, or the validity or enforceability thereof shall be contested, directly or indirectly, by the Company or any Subsidiary, or a proceeding shall be commenced by the Company or any Subsidiary or any governmental authority having jurisdiction over any of them, seeking to establish the invalidity or unenforceability thereof or the Company or any of its Subsidiaries shall deny in writing that it has any liability or obligation purported to be created under one or more Transaction Documents.

(b) **Notice of a Triggering Event; Redemption Right.** Upon the occurrence of a Triggering Event with respect to the Preferred Shares, the Company shall within one (1) Business Day deliver written notice thereof via electronic mail and overnight courier (with next day delivery specified) (an “**Triggering Event Notice**”) to each Holder. At any time after the earlier of a Holder’s receipt of a Triggering Event Notice and such Holder becoming aware of a Triggering Event (such earlier date, the “**Triggering Event Right Commencement Date**”) and ending (such ending date, the “**Triggering Event Right Expiration Date**”, and each such period, a “**Triggering Event Redemption Right Period**”) on the fifteenth (15th) Trading Day after the later of (x) the later of (1) the date such Triggering Event is cured and (2) the date the Company delivers written notice to the Holders of the cure of such Triggering Event and (y) such Holder’s receipt of a Triggering Event Notice that includes (I) a reasonable description of the applicable Triggering Event, (II) a certification as to whether, in the opinion of the Company, such Triggering Event is capable of being cured and, if applicable, a reasonable description of any existing plans of the Company to cure such Triggering Event and (III) a certification as to the date the Triggering Event occurred and, if cured on or prior to the date of such Triggering Event Notice, the applicable Triggering Event Right Expiration Date, such Holder may require the Company to redeem (regardless of whether such Triggering Event has been cured on or prior to the Triggering Event Right Expiration Date) all or any of the Preferred Shares by delivering written notice thereof (the “**Triggering Event Redemption Notice**”) to the Company, which Triggering Event Redemption Notice shall indicate the number of the Preferred Shares such Holder is electing to redeem. Each of the Preferred Shares subject to redemption by the Company pursuant to this Section 5(b) shall be redeemed by the Company at a price equal to the greater of (i) the product of (A) the Conversion Amount to be redeemed multiplied by (B) the Redemption Premium and (ii) the product of (X) the Conversion Rate with respect to the Conversion Amount in effect at such time as such Holder delivers a Triggering Event Redemption Notice multiplied by (Y) the product of (1) the Redemption Premium multiplied by (2) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date immediately preceding such Triggering Event and ending on the date the Company makes the entire payment required to be made under this Section 5(b) (the “**Triggering Event Redemption Price**”). Redemptions required by this Section 5(b) shall be made in accordance with the provisions of Section 12. To the extent redemptions required by this Section 5(b) are deemed or determined by a court of competent jurisdiction to be prepayments of the Preferred Shares by the Company, such redemptions shall be deemed to be voluntary prepayments. Notwithstanding anything to the contrary in this Section 5(b), but subject to Section 4(d), until the Triggering Event Redemption Price (together with any Late Charges thereon) is paid in full, the Conversion Amount submitted for redemption under this Section 5(b) (together with any Late Charges thereon) may be converted, in whole or in part, by such Holder into Common Stock pursuant to the terms of this Certificate of Designations. In the event of the Company’s redemption of any of the Preferred Shares under this Section 5(b), a Holder’s damages would be uncertain and difficult to estimate because of the parties’ inability to predict future interest rates and the uncertainty of the availability of a suitable substitute investment opportunity for such Holder. Accordingly, any redemption premium due under this Section 5(b) is intended by the parties to be, and shall be deemed, a reasonable estimate of such Holder’s actual loss of its investment opportunity and not as a penalty. Any redemption upon a Triggering Event shall not constitute an election of remedies by the applicable Holder or any other Holder, and all other rights and remedies of each Holder shall be preserved.

(c) **Mandatory Redemption upon Bankruptcy Triggering Event.** Notwithstanding anything to the contrary herein, and notwithstanding any conversion that is then required or in process, upon any Bankruptcy Triggering Event, the Company shall immediately redeem, out of funds legally available therefor, each of the Preferred Shares then outstanding at a redemption price equal to the applicable Triggering Event Redemption Price (calculated as if such Holder shall have delivered the Triggering Event Redemption Notice immediately prior to the occurrence of such Bankruptcy Triggering Event), without the requirement for any notice or demand or other action by any Holder or any other person or entity, provided that a Holder may, in its sole discretion, waive such right to receive payment upon a Bankruptcy Triggering Event, in whole or in part, and any such waiver shall not affect any other rights of such Holder or any other Holder hereunder, including any other rights in respect of such Bankruptcy Triggering Event, any right to conversion, and any right to payment of such Triggering Event Redemption Price or any other Redemption Price, as applicable.

6. Rights Upon Fundamental Transactions.

(a) **Assumption.** The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity (if the Successor Entity is not the Company) assumes in writing all of the obligations of the Company under this Certificate of Designations and the other Transaction Documents in accordance with the provisions of this Section 6(a) pursuant to written agreements in form and substance satisfactory to the Required Holders and approved by the Required Holders prior to such

Fundamental Transaction, including agreements to deliver to each holder of Preferred Shares in exchange for such Preferred Shares a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Certificate of Designations, including, without limitation, having a stated value and dividend rate equal to the stated value and dividend rate of the Preferred Shares held by the Holders and having similar ranking to the Preferred Shares, and satisfactory to the Required Holders and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose shares of common stock are quoted on or listed for trading on an Eligible Market. Upon the occurrence of any Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designations and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Certificate of Designations and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein and therein. In addition to the foregoing, upon consummation of a Fundamental Transaction, the Successor Entity (if the Successor Entity is not the Company) shall deliver to each Holder confirmation that there shall be issued upon conversion or redemption of the Preferred Shares at any time after the consummation of such Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 7 and 17, which shall continue to be receivable thereafter)) issuable upon the conversion or redemption of the Preferred Shares prior to such Fundamental Transaction, such shares of the publicly traded common stock (or their equivalent) of the Successor Entity (including its Parent Entity) which each Holder would have been entitled to receive upon the happening of such Fundamental Transaction had all the Preferred Shares held by each Holder been converted immediately prior to such Fundamental Transaction (without regard to any limitations on the conversion of the Preferred Shares contained in this Certificate of Designations), as adjusted in accordance with the provisions of this Certificate of Designations. Notwithstanding the foregoing, such Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 6(a) to permit the Fundamental Transaction without the assumption of the Preferred Shares. The provisions of this Section 6 shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion or redemption of the Preferred Shares.

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(b) Notice of a Change of Control Redemption Right. No sooner than twenty (20) Trading Days nor later than ten (10) Trading Days prior to the consummation of a Change of Control (the "**Change of Control Date**"), but not prior to the public announcement of such Change of Control, the Company shall deliver written notice thereof via electronic mail and overnight courier to each Holder (a "**Change of Control Notice**"). At any time during the period beginning after a Holder's receipt of a Change of Control Notice or such Holder becoming aware of a Change of Control if a Change of Control Notice is not delivered to such Holder in accordance with the immediately preceding sentence (as applicable) and ending on the later of (A) the date of consummation of such Change of Control or (B) twenty (20) Trading Days after the date of receipt of such Change of Control Notice or (C) twenty (20) Trading Days after the date of the announcement of such Change of Control, such Holder may require the Company to redeem all or any portion of such Holder's Preferred Shares by delivering written notice thereof ("**Change of Control Redemption Notice**") to the Company, which Change of Control Redemption Notice shall indicate the number of Preferred Shares such Holder is electing to have the Company redeem. Each Preferred Share subject to redemption pursuant to this Section 6(b) shall be redeemed by the Company in funds legally available therefor at a price equal to the greatest of (i) the product of (w) the Change of Control Redemption Premium multiplied by (y) the Conversion Amount of the Preferred Shares being redeemed, (ii) the product of (x) the Change of Control Redemption Premium multiplied by (y) the product of (A) the Conversion Amount of the Preferred Shares being redeemed multiplied by (B) the quotient determined by dividing (I) the greatest Closing Sale Price of the shares of Common Stock during the period beginning on the date immediately preceding the earlier to occur of (1) the consummation of the applicable Change of Control and (2) the public announcement of such Change of Control and ending on the date such Holder delivers the Change of Control Redemption Notice by (II) the Conversion Price then in effect and (iii) the product of (y) the Change of Control Redemption Premium multiplied by (z) the product of (A) the Conversion Amount of the Preferred Shares being redeemed multiplied by (B) the quotient of (I) the aggregate cash consideration and the aggregate cash value of any non-cash consideration constituting publicly-traded securities shall be valued at the highest of the Closing Sale Price of such securities as of the Trading Day immediately prior to the consummation of such Change of Control, the Closing Sale Price of such securities on the Trading Day immediately following the public announcement of such proposed Change of Control and the Closing Sale Price of such securities on the Trading Day immediately prior to the public announcement of such proposed Change of Control) divided by (II) the Conversion Price then in effect (the "**Change of Control Redemption Price**"). Redemptions required by this Section 6(b) shall have priority to payments to all other stockholders of the Company in connection with such Change of Control. To the extent redemptions required by this Section 6(b) are deemed or determined by a court of competent jurisdiction to be prepayments of the Preferred Shares by the Company, such redemptions shall be deemed to be voluntary prepayments. Notwithstanding anything to the contrary in this Section 6(b), but subject to Section 4(d), until the applicable Change of Control Redemption Price (together with any Late Charges thereon) is paid in full to the applicable Holder, the Preferred Shares submitted by such Holder for redemption under this Section 6(b) may be converted, in whole or in part, by such Holder into Common Stock pursuant to Section 4 or in the event the Conversion Date is after the consummation of such Change of Control, stock or equity interests of the Successor Entity substantially equivalent to the Company's shares of Common Stock pursuant to Section 4. In the event of the Company's redemption of any of the Preferred Shares under this Section 6(b), such Holder's damages would be uncertain and difficult to estimate because of the parties' inability to predict future interest rates and the uncertainty of the availability of a suitable substitute investment opportunity for a Holder. Accordingly, any redemption premium due under this Section 6(b) is intended by the parties to be, and shall be deemed, a reasonable estimate of such Holder's actual loss of its investment opportunity and not as a penalty. The Company shall make payment of the applicable Change of Control Redemption Price concurrently with the consummation of such Change of Control if a Change of Control Redemption Notice is received prior to the consummation of such Change of Control and within two (2) Trading Days after the Company's receipt of such notice otherwise (the "**Change of Control Redemption Date**"). Redemptions required by this Section 6 shall be made in accordance with the provisions of Section 12.

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7. Rights Upon Issuance of Purchase Rights and Other Corporate Events.

(a) Purchase Rights. In addition to any adjustments pursuant to Section 8 below, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to all or substantially all of the record holders of any class of Common Stock (the "**Purchase Rights**"), then each Holder 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 all the Preferred Shares (without taking into account any limitations or restrictions on the convertibility of the Preferred Shares and assuming for such purpose that all the Preferred Shares were converted at the Conversion Price as of the applicable record date) held by such Holder immediately prior to the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that such Holder's right to participate in any such Purchase Right would result in such Holder and the other Attribution Parties exceeding the Maximum Percentage, then such Holder shall not be entitled to participate in such Purchase Right to such extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent of any such excess) and such Purchase Right to such extent shall be held in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable) for the benefit of such Holder until such time or times, if ever, as its right thereto would not result in such Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times such Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable)) to the same extent as if there had been no such limitation).

(b) Other Corporate Events. In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a "**Corporate Event**"), the Company shall make appropriate provision to ensure that each Holder will thereafter have the right, at such Holder's option, to receive upon a conversion of all the Preferred Shares held by such Holder (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which such Holder would have been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by such Holder upon the consummation of such Corporate Event (without taking into account any limitations or restrictions on the convertibility of the Preferred Shares set forth in this Certificate of Designations) or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of shares of

Common Stock in connection with the consummation of such Corporate Event in such amounts as such Holder would have been entitled to receive had the Preferred Shares held by such Holder initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant the preceding sentence shall be in a form and substance satisfactory to the Required Holders. The provisions of this Section 7 shall apply similarly and equally to successive Corporate Events and shall be applied without regard to any limitations on the conversion or redemption of the Preferred Shares set forth in this Certificate of Designations.

8. Rights Upon Issuance of Other Securities.

(a) Adjustment of Conversion Price upon Issuance of Common Stock. If and whenever on or after the Subscription Date the Company grants, issues or sells (or enters into any agreement or publicly announces its intention to grant, issue or sell), or in accordance with this Section 8(a) is deemed to have granted, issued or sold, any shares of Common Stock (including the granting, issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding any Excluded Securities granted, issued or sold or deemed to have been granted, issued or sold) for a consideration per share (the “**New Issuance Price**”) less than a price equal to the Conversion Price in effect immediately prior to such granting, issuance or sale or deemed granting, issuance or sale (such Conversion Price then in effect is referred to herein as the “**Applicable Price**”) (the foregoing a “**Dilutive Issuance**”), then, immediately after such Dilutive Issuance, the Conversion Price then in effect shall be reduced to an amount equal to the New Issuance Price. For all purposes of the foregoing (including, without limitation, determining the adjusted Conversion Price and the New Issuance Price under this Section 8(a)), the following shall be applicable:

(i) Issuance of Options. If the Company in any manner grants, issues or sells (or enters into any agreement to grant, issue or sell) any Options and the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting, issuance or sale of such Option for such price per share. For purposes of this Section 8(a)(i), the “lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting, issuance or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such Option for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof, minus (2) the sum of all amounts paid or payable to the holder of such Option (or any other Person) with respect to any one share of Common Stock upon the granting, issuance or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Option (or any other Person). Except as contemplated below, no further adjustment of the Conversion Price shall be made upon the actual issuance of such share of Common Stock or of such Convertible Securities upon the exercise of such Options or otherwise pursuant to the terms thereof or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

(ii) Issuance of Convertible Securities. If the Company in any manner issues or sells (or enters into any agreement to issue or sell) any Convertible Securities and the lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale (or the time of execution of such agreement to issue or sell, as applicable) of such Convertible Securities for such price per share. For the purposes of this Section 8(a)(ii), the “lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to one share of Common Stock upon the issuance or sale (or pursuant to the agreement to issue or sell, as applicable) of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security or otherwise pursuant to the terms thereof and (y) the lowest conversion price set forth in such Convertible Security for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Convertible Security (or any other Person) with respect to any one share of Common Stock upon the issuance or sale (or the agreement to issue or sell, as applicable) of such Convertible Security plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Convertible Security (or any other Person). Except as contemplated below, no further adjustment of the Conversion Price shall be made upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities or otherwise pursuant to the terms thereof, and if any such issuance or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of the Conversion Price has been or is to be made pursuant to other provisions of this Section 8(a), except as contemplated below, no further adjustment of the Conversion Price shall be made by reason of such issuance or sale.

(iii) Change in Option Price or Rate of Conversion. If the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares of Common Stock increases or decreases at any time (other than proportional changes in conversion or exercise prices, as applicable, in connection with an event referred to in Section 8(b) below), the Conversion Price in effect at the time of such increase or decrease shall be adjusted to the Conversion Price which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate (as the case may be) at the time initially granted, issued or sold. For purposes of this Section 8(a)(iii), if the terms of any Option or Convertible Security (including, without limitation, any Option or Convertible Security that was outstanding as of the Subscription Date) are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 8(a) shall be made if such adjustment would result in an increase of the Conversion Price then in effect.

(iv) Calculation of Consideration Received. If any Option and/or Convertible Security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company (as determined by the Required Holders, the “**Primary Security**”, and such Option and/or Convertible Security and/or Adjustment Right, the “**Secondary Securities**” and together with the Primary Security, each a “**Unit**”), together comprising one integrated transaction, the aggregate consideration per share of Common Stock with respect to such Primary Security shall be deemed to be the lower of (x) the purchase price of such Unit, (y) if such Primary Security is an Option and/or Convertible Security, the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise or conversion of the Primary Security in accordance with Section 8(a)(i) or 8(a)(ii) above and (z) the lowest VWAP of the shares of Common Stock on any Trading Day during the five (5) Trading Day period (the “**Adjustment Period**”) immediately following the public announcement of such Dilutive Issuance (for the avoidance of doubt, if such public announcement is released prior to the opening of the Principal Market on a Trading Day, such Trading Day shall be the first Trading Day in such five (5) Trading Day period and if any Preferred Shares are converted, on any given Conversion Date during any such Adjustment Period, solely with respect to such Preferred Shares converted on such applicable Conversion Date, such applicable Adjustment Period shall be deemed to have ended on, and included, the Trading Day immediately prior to such Conversion Date). If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount of consideration received by the Company therefor. If any shares of Common Stock, Options or Convertible Securities are

issued or sold for a consideration other than cash, the amount of such consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company for such securities will be the arithmetic average of the VWAPs of such security for each of the five (5) Trading Days immediately preceding the date of receipt. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities (as the case may be). The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Required Holders. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five (5) Trading Days after the tenth (10th) day following such Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Required Holders. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) Record Date. If the Company takes a record of the holders of shares of Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase shares of Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issuance or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase (as the case may be).

(b) Adjustment of Conversion Price upon Subdivision or Combination of Common Stock. Without limiting any provision of Sections 7, 17 or 8(a), if the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. Without limiting any provision of Sections 7, 17 or 8(a), if the Company at any time on or after the Subscription Date combines (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased. Any adjustment pursuant to this Section 8(b) shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this Section 8(b) occurs during the period that a Conversion Price is calculated hereunder, then the calculation of such Conversion Price shall be adjusted appropriately to reflect such event.

(c) Holder’s Right of Adjusted Conversion Price. In addition to and not in limitation of the other provisions of this Section 8(b), if the Company in any manner issues or sells or enters into any agreement to issue or sell, any Common Stock, Options or Convertible Securities (any such securities, “**Variable Price Securities**”) after the Subscription Date that are issuable pursuant to such agreement or convertible into or exchangeable or exercisable for shares of Common Stock at a price which varies or may vary with the market price of the shares of Common Stock, including by way of one or more reset(s) to a fixed price, but exclusive of such formulations reflecting customary anti-dilution provisions (such as share splits, share combinations, share dividends and similar transactions) (each of the formulations for such variable price being herein referred to as, the “**Variable Price**”), the Company shall provide written notice thereof via electronic mail and overnight courier to each Holder on the date of such agreement and/or the issuance of such shares of Common Stock, Convertible Securities or Options, as applicable. From and after the date the Company enters into such agreement or issues any such Variable Price Securities, each Holder shall have the right, but not the obligation, in its sole discretion to substitute the Variable Price for the Conversion Price upon conversion of the Preferred Shares by designating in the Conversion Notice delivered upon any conversion of Preferred Shares that solely for purposes of such conversion such Holder is relying on the Variable Price rather than the Conversion Price then in effect. A Holder’s election to rely on a Variable Price for a particular conversion of Preferred Shares shall not obligate such Holder to rely on a Variable Price for any future conversions of Preferred Shares.

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(d) Stock Combination Event Adjustments. If at any time and from time to time on or after the Subscription Date there occurs any stock split, stock dividend, stock combination, reverse stock split, recapitalization or other similar transaction involving the Common Stock (each, a “**Stock Combination Event**”, and such date thereof, the “**Stock Combination Event Date**”) and the Event Market Price is less than the Conversion Price then in effect (after giving effect to the adjustment in Section 8(b) above), then on the sixteenth (16th) Trading Day immediately following such Stock Combination Event Date, the Conversion Price then in effect on such sixteenth (16th) Trading Day (after giving effect to the adjustment in Section 8(b) above) shall be reduced (but in no event increased) to the Event Market Price. For the avoidance of doubt, if the adjustment in the immediately preceding sentence would otherwise result in an increase in the Conversion Price hereunder, no adjustment shall be made.

(e) Other Events. In the event that the Company (or any Subsidiary) shall take any action to which the provisions hereof are not strictly applicable, or, if applicable, would not operate to protect any Holder from dilution or if any event occurs of the type contemplated by the provisions of this Section 8 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Board shall in good faith determine and implement an appropriate adjustment in the Conversion Price so as to protect the rights of such Holder, provided that no such adjustment pursuant to this Section 8(e) will increase the Conversion Price as otherwise determined pursuant to this Section 8, provided further that if such Holder does not accept such adjustments as appropriately protecting its interests hereunder against such dilution, then the Board and such Holder shall agree, in good faith, upon an independent investment bank of nationally recognized standing to make such appropriate adjustments, whose determination shall be final and binding absent manifest error and whose fees and expenses shall be borne by the Company.

(f) Calculations. All calculations under this Section 8 shall be made by rounding to the nearest cent or the nearest 1/100th of a share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issue or sale of Common Stock.

(g) Voluntary Adjustment by Company. Subject to the rules and regulations of the Principal Market, the Company may at any time any Preferred Shares remain outstanding, with the prior written consent of the Required Holders, reduce the then current Conversion Price to any amount and for any period of time deemed appropriate by the Board.

9. Reserved.

10. Reserved.

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11. Authorized Shares.

(a) Reservation. Following the Stockholder Approval Date (as defined in the Securities Purchase Agreement), so long as any Preferred Shares remain outstanding, the Company shall at all times reserve at least 200% of the aggregate number of shares of Common Stock as shall from time to time be necessary to effect the conversion of all of the Preferred Shares then outstanding (without regard to any limitations on conversions) (the “**Required Reserve Amount**”). The Required Reserve Amount (including, without limitation, each increase in the number of shares so reserved) shall be allocated pro rata among the Holders based on the number of the Preferred Shares held by each Holder on the Initial Issuance Date or increase in the number of reserved shares, as the case may be (the “**Authorized Share Allocation**”). In the event that a Holder shall sell or otherwise transfer any of such Holder’s Preferred Shares, each transferee shall be allocated a pro rata portion of such Holder’s Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any Preferred Shares shall be allocated to the remaining Holders of Preferred Shares, pro rata based on the number of the Preferred Shares then held by the Holders.

(b) Insufficient Authorized Shares. If, notwithstanding Section 11(a) and not in limitation thereof, at any time while any of the Preferred Shares remain

outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon conversion of the Preferred Shares at least a number of shares of Common Stock equal to the Required Reserve Amount (an “**Authorized Share Failure**”), then the Company shall immediately take all action necessary to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for the Preferred Shares then outstanding (or deemed outstanding pursuant to Section 11(a) above). Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders’ approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal (or, if a majority of the voting power then in effect of the capital stock of the Company consents to such increase, in lieu of such proxy statement, deliver to the stockholders of the Company an information statement that has been filed with (and either approved by or not subject to comments from) the SEC with respect thereto). In the event that the Company is prohibited from issuing shares of Common Stock to a Holder upon any conversion due to the failure by the Company to have sufficient shares of Common Stock available out of the authorized but unissued shares of Common Stock (such unavailable number of shares of Common Stock, the “**Authorized Failure Shares**”), in lieu of delivering such Authorized Failure Shares to such Holder, the Company shall pay legally available funds in exchange for the redemption of such portion of the Conversion Amount of the Preferred Shares convertible into such Authorized Failure Shares at a price equal to the sum of (i) the product of (x) such number of Authorized Failure Shares and (y) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date such Holder delivers the applicable Conversion Notice with respect to such Authorized Failure Shares to the Company and ending on the date of such issuance and payment under this Section 11(a); and (ii) to the extent such Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by such Holder of Authorized Failure Shares, any brokerage commissions and other out-of-pocket expenses, if any, of such Holder incurred in connection therewith. Nothing contained in Section 11(a) or this Section 11(b) shall limit any obligations of the Company under any provision of the Securities Purchase Agreement.

12. Redemptions.

(a) General. If a Holder has submitted a Triggering Event Redemption Notice in accordance with Section 5(b), the Company shall deliver the applicable Triggering Event Redemption Price to such Holder in legally available funds within five (5) Business Days after the Company’s receipt of such Holder’s Triggering Event Redemption Notice. If a Holder has submitted a Change of Control Redemption Notice in accordance with Section 6(b), the Company shall deliver the applicable Change of Control Redemption Price to such Holder in legally available funds concurrently with the consummation of such Change of Control if such notice is received prior to the consummation of such Change of Control and within five (5) Business Days after the Company’s receipt of such notice otherwise. If a Holder has submitted a Maturity Redemption Notice in accordance with Section 13 below, the Company shall deliver the applicable Maturity Redemption Price to such Holder in legally available funds on the applicable Maturity Redemption Date. Notwithstanding anything herein to the contrary, in connection with any redemption hereunder at a time a Holder is entitled to receive a cash payment under any of the other Transaction Documents, at the option of such Holder delivered in writing to the Company, the applicable Redemption Price hereunder shall be increased by the amount of such cash payment owed to such Holder under such other Transaction Document and, upon payment in full or conversion in accordance herewith, shall satisfy the Company’s payment obligation under such other Transaction Document. In the event of a redemption of less than all of the Preferred Shares, the Company shall promptly cause to be issued and delivered to such Holder a new Preferred Share Certificate (in accordance with Section 20) (or evidence of the creation of a new Book-Entry) representing the number of Preferred Shares which have not been redeemed. In the event that the Company does not pay the applicable Redemption Price to a Holder within the time period required for any reason (including, without limitation, to the extent such payment is prohibited pursuant to the DGCL), at any time thereafter and until the Company pays such unpaid Redemption Price in full, such Holder shall have the option, in lieu of redemption, to require the Company to promptly return to such Holder all or any of the Preferred Shares that were submitted for redemption and for which the applicable Redemption Price (together with any Late Charges thereon) has not been paid. Upon the Company’s receipt of such notice, (x) the applicable Redemption Notice shall be null and void with respect to such Preferred Shares, and (y) the Company shall immediately return the applicable Preferred Share Certificate, or issue a new Preferred Share Certificate (in accordance with Section 20(d)), to such Holder (unless the Preferred Shares are held in Book-Entry form, in which case the Company shall deliver evidence to such Holder that a Book-Entry for such Preferred Shares then exists), and in each case the Additional Amount of such Preferred Shares shall be increased by an amount equal to the difference between (1) the applicable Redemption Price (as the case may be, and as adjusted pursuant to this Section 12, if applicable) minus (2) the Stated Value portion of the Conversion Amount submitted for redemption. A Holder’s delivery of a notice voiding a Redemption Notice and exercise of its rights following such notice shall not affect the Company’s obligations to make any payments of Late Charges which have accrued prior to the date of such notice with respect to the Preferred Shares subject to such notice.

(b) Redemption by Multiple Holders. Upon the Company’s receipt of a Redemption Notice from any Holder for redemption or repayment as a result of an event or occurrence substantially similar to the events or occurrences described in Section 5(b) or Section 6(b), the Company shall immediately, but no later than one (1) Business Day of its receipt thereof, forward to each other Holder by electronic mail a copy of such notice. If the Company receives one or more Redemption Notices, during the seven (7) Business Day period beginning on and including the date which is two (2) Business Days prior to the Company’s receipt of the initial Redemption Notice and ending on and including the date which is two (2) Business Days after the Company’s receipt of the initial Redemption Notice and the Company is unable to redeem all of the Conversion Amount of such Preferred Shares designated in such initial Redemption Notice and such other Redemption Notices received during such seven (7) Business Day period, then the Company shall redeem a pro rata amount from each Holder based on the Stated Value of the Preferred Shares submitted for redemption pursuant to such Redemption Notices received by the Company during such seven (7) Business Day period.

(c) Company Optional Redemption.

(i) At any time after the Initial Issuance Date, the Company shall have the right to redeem all or any portion of the Preferred Shares then outstanding (the “**Company Optional Redemption Amount**”) on the Company Optional Redemption Date (as defined below) (a “**Company Optional Redemption**”). The Preferred Shares subject to redemption pursuant to this Section 12(c) shall be redeemed by the Company in cash at a price (the “**Company Optional Redemption Price**”) equal to the product of (i) 110% and (ii) the Stated Value of the Preferred Shares being redeemed plus the Additional Amount thereon, as of the Company Optional Redemption Date.

(ii) The Company may exercise its right hereunder by delivering a written notice thereof by facsimile or electronic mail and overnight courier to all, but not less than all, of the Holders (the “**Company Optional Redemption Notice**” and the date all of the Holders received such notice is referred to as the “**Company Optional Redemption Notice Date**”). Any Company Optional Redemption Notice shall be irrevocable. The Company Optional Redemption Notice shall (x) state the date on which the Company Optional Redemption shall occur (the “**Company Optional Redemption Date**”) which date shall not be less than twenty (20) Trading Days and not more than forty (40) Trading Days following the Company Optional Redemption Notice Date, and (y) state the aggregate Conversion Amount of the Preferred Shares which is being redeemed in such Company Optional Redemption from such Holder and all of the other Holders of the Preferred Shares (which shall be allocated, pro rata, to each Holder) pursuant to this Section 12(c) on the Company Optional Redemption Date. All Conversion Amounts converted by a Holder after the Company Optional Redemption Notice Date shall reduce the Company Optional Redemption Amount of the Preferred Shares of such Holder required to be redeemed on the Company Optional Redemption Date.

(iii) With respect to any Preferred Shares which have not been converted by a holder of the Preferred Shares prior to the Company Optional Redemption Date and have been specified to be redeemed by the Company pursuant to the Company Optional Redemption and which have been redeemed in accordance with the provisions of this Section 12(c), (i) Dividends shall cease to accrue on such Preferred Shares, (ii) such Preferred Shares shall no longer be deemed outstanding and (iii) all rights with respect to such Preferred Shares shall cease and terminate.

(iv) In the event of the Company's redemption of any of the Preferred Shares under this Section 12(c), a Holder's damages would be uncertain and difficult to estimate because of the parties' inability to predict future interest rates and the uncertainty of the availability of a suitable substitute investment opportunity for such Holder. Accordingly, any redemption premium due under Section 12(c) is intended by the parties to be, and shall be deemed, a reasonable estimate of such Holder's actual loss of its investment opportunity and not as a penalty. For purposes of clarification, a Company Optional Redemption shall be subject to the applicable provisions of Section 12(a).

13. Voting Rights. Except as otherwise provided herein or as required by applicable law and subject to the provisions of Section 4(d) hereof, Holders of Preferred Shares shall be entitled to vote with holders of the Common Stock on all matters that such holders of Common Stock are entitled to vote upon, in the same manner and with the same effect as the holders of Common Stock, voting together with the holders of Common Stock as a single class. Subject to the provisions of Section 4(d) hereof, each Preferred Share shall entitle the Holder thereof to cast that number of votes per Preferred Share equal to the Stated Value of such Preferred Share divided by Nasdaq Minimum Price (as defined in Nasdaq Listing Rule 5635(d)) immediately preceding the Subscription Date (or \$2.253 per share, as of the date of this Certificate of Designations, and subject to adjustments for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions following the date hereof). For purposes of clarity, this Nasdaq Minimum Price shall apply only for purposes of this Section 13 of the Certificate of Designations and not apply to any other section of the Certificate of Designations or any Transaction Document. Notwithstanding the foregoing, to the extent that under the DGCL the vote of the holders of the Preferred Shares, voting separately as a class or series, as applicable, is required to authorize a given action of the Company, the affirmative vote or consent of the Required Holders of the shares of the Preferred Shares, voting together in the aggregate and not in separate series unless required under the DGCL, represented at a duly held meeting at which a quorum is present or by written consent of the Required Holders (except as otherwise may be required under the DGCL), voting together in the aggregate and not in separate series unless required under the DGCL, shall constitute the approval of such action by both the class or the series, as applicable. For the avoidance of doubt, for purposes of determining the presence of a quorum at any meeting of the stockholders of the Company at which the Preferred Shares are entitled to vote, the number of Preferred Shares and votes represented by such shares shall be counted on an as converted to Common Stock basis, subject to any limitations on conversion set forth herein. Holders of the Preferred Shares shall be entitled to written notice of all stockholder meetings or written consents (and copies of proxy materials and other information sent to stockholders) with respect to which they would be entitled to vote, which notice would be provided pursuant to the Bylaws and the DGCL.

14. Covenants. For so long as any Preferred Shares are outstanding, without the prior written consent of the Required Holders:

(a) Incurrence of Indebtedness. Until the date on which at least 80% of the Preferred Shares have been converted to Common Stock, the Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, incur or guarantee, assume or suffer to exist any Indebtedness (other than Permitted Indebtedness).

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(b) Existence of Liens. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, allow or suffer to exist any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by the Company or any of its Subsidiaries (collectively, "Liens") other than Permitted Liens.

(c) Restricted Payments and Investments. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, redeem, defease, repurchase, repay or make any payments in respect of, by the payment of cash or cash equivalents (in whole or in part, whether by way of open market purchases, tender offers, private transactions or otherwise), all or any portion of any Indebtedness (other pursuant to this Certificate of Designations) whether by way of payment in respect of principal of (or premium, if any) or interest on, such Indebtedness or make any Investment, as applicable, if at the time such payment with respect to such Indebtedness and/or Investment, as applicable, is due or is otherwise made or, after giving effect to such payment, (i) an event constituting a Triggering Event has occurred and is continuing or (ii) an event that with the passage of time and without being cured would constitute a Triggering Event has occurred and is continuing.

(d) Restriction on Redemption and Cash Dividends. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, redeem, repurchase or declare or pay any cash dividend or distribution on any of its capital stock (other than as required by this Certificate of Designations, the Certificate of Designations for the Series F-1 Preferred Stock and the Amended and Restated Certificate of Designations for the Series F Preferred Stock).

(e) Restriction on Transfer of Assets. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, sell, lease, license, assign, transfer, spin-off, split-off, close, convey or otherwise dispose of any assets or rights of the Company or any Subsidiary owned or hereafter acquired whether in a single transaction or a series of related transactions, other than (i) sales, leases, licenses, assignments, transfers, conveyances and other dispositions of such assets or rights by the Company and its Subsidiaries in the ordinary course of business consistent with its past practice, or (ii) sales of inventory and product in the ordinary course of business.

(f) Maturity of Indebtedness. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, permit any Indebtedness of the Company or any of its Subsidiaries to mature or accelerate prior to the conversion of all the Preferred Shares.

(g) Change in Nature of Business. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, engage in any material line of business substantially different from those lines of business conducted by or publicly contemplated to be conducted by the Company and/or its Subsidiaries on the Subscription Date or any business reasonably related or incidental thereto. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, modify its or their corporate structure or purpose in any material respect.

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(h) Preservation of Existence, Etc. The Company 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 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; provided, however, that the Company shall have the right to merge or combine wholly-owned Subsidiaries hereunder, or eliminate or dissolve foreign Subsidiaries, in each case where such restructuring does not have a material impact on the Company's assets or ability to comply with the provisions hereof.

(i) Maintenance of Properties, Etc. The Company shall maintain and preserve, and cause each of its Subsidiaries to maintain and preserve, all of its properties which are necessary or useful in the proper conduct of its business in good working order and condition, ordinary wear and tear excepted, and comply, and cause each of its Subsidiaries to comply, at all times with the provisions of all leases to which it is a party as lessee or under which it occupies property, so as to prevent any loss or forfeiture thereof or thereunder.

(j) Maintenance of Intellectual Property. The Company will, and will cause each of its Subsidiaries to, take all action necessary or advisable to maintain all of the Intellectual Property Rights of the Company and/or any of its Subsidiaries that are necessary or material to the conduct of its business in full force and effect.

(k) Maintenance of Insurance. The Company shall use reasonable best efforts to maintain, and cause each of its Subsidiaries to maintain, insurance with responsible and reputable insurance companies or associations (including, without limitation, comprehensive general liability, hazard, rent and business interruption insurance) with respect to its properties (including all real properties leased or owned by it) and business, in such amounts and covering such risks as are generally consistent with the coverage held by the Company on the Initial Issuance Date.

(l) Transactions with Affiliates. The Company shall not, nor shall it permit any of its Subsidiaries to, enter into, renew, extend or be a party to, any transaction

or series of related transactions (including, without limitation, the purchase, sale, lease, transfer or exchange of property or assets of any kind or the rendering of services of any kind) with any affiliate, except transactions in the ordinary course of business in a manner and to an extent, if applicable, consistent with past practice and necessary or desirable for the prudent operation of its business, for fair consideration and on terms no less favorable to it or its Subsidiaries than would be reasonably expected to be obtained in a comparable arm's length transaction with a Person that is not an affiliate thereof.

(m) Restricted Issuances. The Company shall not, directly or indirectly, without the prior written consent of the Required Holders, (i) issue any Preferred Shares (other than as contemplated by the Securities Purchase Agreement and this Certificate of Designations), (ii) issue any other securities that would cause a breach or default under this Certificate of Designations or the Warrants, or (iii) prior to the conversion of at least 80% of the Preferred Shares, other than the issuance of stock options under any Approved Stock Plan or the declaration of dividends, create, or authorize the creation of, any additional class or series of capital stock of the Company (or any security convertible into or exercisable for any class or series of capital stock of the Company) or issue or sell, or obligate itself to issue or sell, any securities of the Company (or any security convertible into or exercisable for any class or series of capital stock of the Company), including any class or series of capital stock of the Company that ranks superior to the Series G Preferred Stock in rights, preferences, or privileges (including with respect to dividends, liquidation, redemption, or voting), below the Conversion Price.

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(n) Restrictions on Acquisitions. The Company shall not acquire, in any transaction or series of related transactions, the stock or any material assets of another Person, or enter into any joint venture with any other Person, for aggregate consideration (including the direct or indirect assumption of liabilities) valued at more than 10% of the total consolidated assets of the Company as of the most recent quarter-end prior to such acquisition as reflected on the consolidated balance sheet of the Company prepared in accordance with generally accepted accounting principles consistently applied.

(o) No Change of Control. The Company shall not effect, or enter into any agreement to effect, a Change of Control.

(p) Organizational Documents. The Company shall not amend, alter, modify, or repeal the Certificate of Incorporation, this Certificate of Designation, or the bylaws of the Company, including the amendment of the Certificate of Incorporation by the adoption or amendment of any Certificate of Designation or similar document, in each case, in any manner that materially adversely affects any of the Holders of the Preferred Shares.

(q) Reserved.

(r) Change in Number of Directors. The Company shall not increase the authorized number of directors constituting the Board from eight.

(s) Stay, Extension and Usury Laws. To the extent that it may lawfully do so, the Company (A) agrees that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law (wherever or whenever enacted or in force) that may affect the covenants or the performance of this Certificate of Designations; and (B) expressly waives all benefits or advantages of any such law and agrees that it will not, by resort to any such law, hinder, delay or impede the execution of any power granted to the Holders by this Certificate of Designations, but will suffer and permit the execution of every such power as though no such law has been enacted.

(t) Taxes. The Company and its Subsidiaries shall pay when due all taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against the Company and its Subsidiaries or their respective assets or upon their ownership, possession, use, operation or disposition thereof or upon their rents, receipts or earnings arising therefrom (except where the failure to pay would not, individually or in the aggregate, have a material effect on the Company or any of its Subsidiaries). The Company and its Subsidiaries shall file on or before the due date therefor all personal property tax returns (except where the failure to file would not, individually or in the aggregate, have a material effect on the Company or any of its Subsidiaries). Notwithstanding the foregoing, the Company and its Subsidiaries may contest, in good faith and by appropriate proceedings, taxes for which they maintain adequate reserves therefor in accordance with GAAP.

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(u) Independent Investigation. At the request of any Holder either (x) at any time when a Triggering Event has occurred and is continuing, (y) upon the occurrence of an event that with the passage of time or giving of notice would constitute a Triggering Event or (z) at any time such Holder reasonably believes a Triggering Event may have occurred or be continuing, the Company shall hire an independent, reputable investment bank selected by the Company and approved by such Holder to investigate as to whether any breach of the Certificate of Designations has occurred (the "**Independent Investigator**"). If the Independent Investigator determines that such breach of the Certificate of Designations has occurred, the Independent Investigator shall notify the Company of such breach and the Company shall deliver written notice to each Holder of such breach. In connection with such investigation, the Independent Investigator may, during normal business hours, inspect all contracts, books, records, personnel, offices and other facilities and properties of the Company and its Subsidiaries and, to the extent available to the Company after the Company uses reasonable efforts to obtain them, the records of its legal advisors and accountants (including the accountants' work papers) and any books of account, records, reports and other papers not contractually required of the Company to be confidential or secret, or subject to attorney-client or other evidentiary privilege, and the Independent Investigator may make such copies and inspections thereof as the Independent Investigator may reasonably request. The Company shall furnish the Independent Investigator with such financial and operating data and other information with respect to the business and properties of the Company as the Independent Investigator may reasonably request. The Company shall permit the Independent Investigator to discuss the affairs, finances and accounts of the Company with, and to make proposals and furnish advice with respect thereto to, the Company's officers, directors, key employees and independent public accountants or any of them (and by this provision the Company authorizes said accountants to discuss with such Independent Investigator the finances and affairs of the Company and any Subsidiaries), all at such reasonable times, upon reasonable notice, and as often as may be reasonably requested.

15. Liquidation, Dissolution, Winding-Up. In the event of a Liquidation Event, the Holders shall be entitled to receive in cash out of the assets of the Company, whether from capital or from earnings available for distribution to its stockholders (the "**Liquidation Funds**"), before any amount shall be paid to the holders of any of shares of Junior Stock, but pari passu with any Parity Stock then outstanding, an amount per Preferred Share equal to the greater of (A) 125% of the Conversion Amount of such Preferred Share on the date of such payment and (B) the amount per share such Holder would receive if such Holder converted such Preferred Share into Common Stock immediately prior to the date of such payment, provided that if the Liquidation Funds are insufficient to pay the full amount due to the Holders and holders of shares of Parity Stock, then each Holder and each holder of Parity Stock shall receive a percentage of the Liquidation Funds equal to the full amount of Liquidation Funds payable to such Holder and such holder of Parity Stock as a liquidation preference, in accordance with their respective certificate of designations (or equivalent), as a percentage of the full amount of Liquidation Funds payable to all holders of Preferred Shares and all holders of shares of Parity Stock. To the extent necessary, the Company shall cause such actions to be taken by each of its Subsidiaries so as to enable, to the maximum extent permitted by law, the proceeds of a Liquidation Event to be distributed to the Holders in accordance with this Section 16. All the preferential amounts to be paid to the Holders under this Section 16 shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any Liquidation Funds of the Company to the holders of shares of Junior Stock in connection with a Liquidation Event as to which this Section 16 applies.

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16. Distribution of Assets. In addition to any adjustments pursuant to Section 7(a) and Section 8, if the Company shall declare or make any dividend or other distributions of its assets (or rights to acquire its assets) to any or all holders of shares of Common Stock, by way of return of capital or otherwise (including without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other

similar transaction) (the “**Distributions**”), then each Holder, as holders of Preferred Shares, will be entitled to such Distributions as if such Holder had held the number of shares of Common Stock acquirable upon complete conversion of the Preferred Shares (without taking into account any limitations or restrictions on the convertibility of the Preferred Shares and assuming for such purpose that the Preferred Share was converted at the Conversion Price as of the applicable record date) immediately prior to the date on which a record is taken for such Distribution or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for such Distributions (provided, however, that to the extent that such Holder’s right to participate in any such Distribution would result in such Holder and the other Attribution Parties exceeding the Maximum Percentage, then such Holder shall not be entitled to participate in such Distribution to such extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to such extent of any such excess) and the portion of such Distribution shall be held in abeyance for the benefit of such Holder until such time or times as its right thereto would not result in such Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times, if any, such Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

17. Vote to Change the Terms of or Issue Preferred Shares. In addition to any other rights provided by law, except where the vote or written consent of the holders of a greater number of shares is required by law or by another provision of the Certificate of Incorporation, without first obtaining the affirmative vote at a meeting duly called for such purpose or the written consent without a meeting of the Required Holders, voting together as a single class, the Company shall not (in any case, whether by amendment, modification, recapitalization, merger, consolidation or otherwise): (a) amend or repeal any provision of, or add any provision to, its Certificate of Incorporation or bylaws, or file any certificate of designations or articles of amendment of any series of shares of preferred stock, if such action would adversely alter or change in any respect the preferences, rights, privileges or powers, or restrictions provided for the benefit of the Preferred Shares hereunder, regardless of whether any such action shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise; provided that the affirmative vote of the Required Holders is not required for changes to the Series F Preferred Stock or Series F-1 Preferred Stock; (b) increase or decrease (other than by conversion) the authorized number of Preferred Shares; (c) without limiting any provision of Section 2, create or authorize (by reclassification or otherwise) any new class or series of Senior Preferred Stock or Parity Stock, other than the Series F-1 Preferred Stock; (d) purchase, repurchase or redeem any shares of Junior Stock (other than pursuant to the terms of the Company’s equity incentive plans and options and other equity awards granted under such plans (that have in good faith been approved by the Board)); (e) without limiting any provision of Section 2, pay dividends or make any other distribution on any shares of any Junior Stock; (f) issue any Preferred Shares other than as contemplated hereby or pursuant to the Securities Purchase Agreement; or (g) without limiting any provision of Section 10, whether or not prohibited by the terms of the Preferred Shares, circumvent a right of the Preferred Shares hereunder.

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18. Transfer of Preferred Shares. A Holder may transfer some or all of its Preferred Shares without the consent of the Company, but any such transfer shall be in compliance with all applicable securities laws.

19. Reissuance of Preferred Share Certificates and Book Entries

(a) Transfer. If any Preferred Shares are to be transferred, the applicable Holder shall surrender the applicable Preferred Share Certificate to the Company (or, if the Preferred Shares are held in Book-Entry form, a written instruction letter to the Company), whereupon the Company will forthwith issue and deliver upon the order of such Holder a new Preferred Share Certificate (in accordance with Section 20(d)) (or evidence of the transfer of such Book-Entry), registered as such Holder may request, representing the outstanding number of Preferred Shares being transferred by such Holder and, if less than the entire outstanding number of Preferred Shares is being transferred, a new Preferred Share Certificate (in accordance with Section 20(d)) to such Holder representing the outstanding number of Preferred Shares not being transferred (or evidence of such remaining Preferred Shares in a Book-Entry for such Holder). Such Holder and any assignee, by acceptance of the Preferred Share Certificate or evidence of Book-Entry issuance, as applicable, acknowledge and agree that, by reason of the provisions of Section 4(c)(i) following conversion or redemption of any of the Preferred Shares, the outstanding number of Preferred Shares represented by the Preferred Shares may be less than the number of Preferred Shares stated on the face of the Preferred Shares.

(b) Lost, Stolen or Mutilated Preferred Share Certificate. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of a Preferred Share Certificate (as to which a written certification and the indemnification contemplated below shall suffice as such evidence), and, in the case of loss, theft or destruction, of any indemnification undertaking by the applicable Holder to the Company in customary and reasonable form and, in the case of mutilation, upon surrender and cancellation of such Preferred Share Certificate, the Company shall execute and deliver to such Holder a new Preferred Share Certificate (in accordance with Section 20(d)) representing the applicable outstanding number of Preferred Shares.

(c) Preferred Share Certificate and Book-Entries Exchangeable for Different Denominations and Forms Each Preferred Share Certificate is exchangeable, upon the surrender hereof by the applicable Holder at the principal office of the Company, for a new Preferred Share Certificate or Preferred Share Certificate(s) or new Book-Entry (in accordance with Section 20(d)) representing, in the aggregate, the outstanding number of the Preferred Shares in the original Preferred Share Certificate, and each such new Preferred Share Certificate and/or new Book-Entry, as applicable, will represent such portion of such outstanding number of Preferred Shares from the original Preferred Share Certificate as is designated in writing by such Holder at the time of such surrender. Each Book-Entry may be exchanged into one or more new Preferred Share Certificates or split by the applicable Holder by delivery of a written notice to the Company into two or more new Book-Entries (in accordance with Section 20(d)) representing, in the aggregate, the outstanding number of the Preferred Shares in the original Book-Entry, and each such new Book-Entry and/or new Preferred Share Certificate, as applicable, will represent such portion of such outstanding number of Preferred Shares from the original Book-Entry as is designated in writing by such Holder at the time of such surrender.

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(d) Issuance of New Preferred Share Certificate or Book-Entry. Whenever the Company is required to issue a new Preferred Share Certificate or a new Book-Entry pursuant to the terms of this Certificate of Designations, such new Preferred Share Certificate or new Book-Entry (i) shall represent, as indicated on the face of such Preferred Share Certificate or in such Book-Entry, as applicable, the number of Preferred Shares remaining outstanding (or in the case of a new Preferred Share Certificate or new Book-Entry being issued pursuant to Section 20(a) or Section 20(c), the number of Preferred Shares designated by such Holder) which, when added to the number of Preferred Shares represented by the other new Preferred Share Certificates or other new Book-Entry, as applicable, issued in connection with such issuance, does not exceed the number of Preferred Shares remaining outstanding under the original Preferred Share Certificate or original Book-Entry, as applicable, immediately prior to such issuance of new Preferred Share Certificate or new Book-Entry, as applicable, and (ii) shall have an issuance date, as indicated on the face of such new Preferred Share Certificate or in such new Book-Entry, as applicable, which is the same as the issuance date of the original Preferred Share Certificate or in such original Book-Entry, as applicable.

20. Remedies, Characterizations, Other Obligations, Breaches and Injunctive Relief. The remedies provided in this Certificate of Designations shall be cumulative and in addition to all other remedies available under this Certificate of Designations and any of the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit any Holder’s right to pursue actual and consequential damages for any failure by the Company to comply with the terms of this Certificate of Designations. No failure on the part of a Holder to exercise, 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 such Holder of any right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. In addition, the exercise of any right or remedy of a Holder at law or equity or under this Certificate of Designations or any of the documents shall not be deemed to be an election of such Holder’s rights or remedies under such documents or at law or equity. The Company covenants to each Holder that there shall be no characterization concerning this instrument other than as expressly provided herein. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by a Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). No failure on the part of a Holder to exercise, 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 such Holder of any right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. In addition, the exercise of any right or remedy of any Holder at law or equity or under Preferred Shares or any of the documents shall not be deemed to be an

election of such Holder's rights or remedies under such documents or at law or equity. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holders and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, each Holder shall be entitled, in addition to all other available remedies, to specific performance and/or temporary, preliminary and permanent injunctive or other equitable relief from any court of competent jurisdiction in any such case without the necessity of proving actual damages and without posting a bond or other security. The Company shall provide all information and documentation to a Holder that is requested by such Holder to enable such Holder to confirm the Company's compliance with the terms and conditions of this Certificate of Designations.

21. Payment of Collection, Enforcement and Other Costs. If (a) any Preferred Shares are placed in the hands of an attorney for collection or enforcement or is collected or enforced through any legal proceeding or a Holder otherwise takes action to collect amounts due under this Certificate of Designations with respect to the Preferred Shares or to enforce the provisions of this Certificate of Designations or (b) there occurs any bankruptcy, reorganization, receivership of the Company or other proceedings affecting Company creditors' rights and involving a claim under this Certificate of Designations, then the Company shall pay the costs incurred by such Holder for such collection, enforcement or action or in connection with such bankruptcy, reorganization, receivership or other proceeding, including, without limitation, attorneys' fees and disbursements. The Company expressly acknowledges and agrees that no amounts due under this Certificate of Designations with respect to any Preferred Shares shall be affected, or limited, by the fact that the purchase price paid for each Preferred Share was less than the original Stated Value thereof.

22. Construction; Headings. This Certificate of Designations shall be deemed to be jointly drafted by the Company and the Holders and shall not be construed against any such Person as the drafter hereof. The headings of this Certificate of Designations are for convenience of reference and shall not form part of, or affect the interpretation of, this Certificate of Designations. Unless the context clearly indicates otherwise, each pronoun herein shall be deemed to include the masculine, feminine, neuter, singular and plural forms thereof. The terms "including," "includes," "include" and words of like import shall be construed broadly as if followed by the words "without limitation." The terms "herein," "hereunder," "hereof" and words of like import refer to this entire Certificate of Designations instead of just the provision in which they are found. Unless expressly indicated otherwise, all section references are to sections of this Certificate of Designations. Terms used in this Certificate of Designations and not otherwise defined herein, but defined in the other Transaction Documents, shall have the meanings ascribed to such terms on the Initial Issuance Date in such other Transaction Documents unless otherwise consented to in writing by the Required Holders.

23. Failure or Indulgence Not Waiver. No failure or delay on the part of a 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 privilege. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. This Certificate of Designations shall be deemed to be jointly drafted by the Company and all Holders and shall not be construed against any Person as the drafter hereof. Notwithstanding the foregoing, nothing contained in this Section 24 shall permit any waiver of any provision of Section 4(d).

24. Dispute Resolution.

(a) Submission to Dispute Resolution

(i) In the case of a dispute relating to a Closing Bid Price, a Closing Sale Price, a Conversion Price, a VWAP or a fair market value or the arithmetic calculation of a Conversion Rate, or the applicable Redemption Price (as the case may be) (including, without limitation, a dispute relating to the determination of any of the foregoing), the Company or the applicable Holder (as the case may be) shall submit the dispute to the other party via electronic mail (A) if by the Company, within two (2) Business Days after the occurrence of the circumstances giving rise to such dispute or (B) if by such Holder at any time after such Holder learned of the circumstances giving rise to such dispute. If such Holder and the Company are unable to promptly resolve such dispute relating to such Closing Bid Price, such Closing Sale Price, such Conversion Price, such VWAP or such fair market value, or the arithmetic calculation of such Conversion Rate or such applicable Redemption Price (as the case may be), at any time after the second (2nd) Business Day following such initial notice by the Company or such Holder (as the case may be) of such dispute to the Company or such Holder (as the case may be), then such Holder may, at its sole option, select an independent, reputable investment bank to resolve such dispute.

(ii) Such Holder and the Company shall each deliver to such investment bank (A) a copy of the initial dispute submission so delivered in accordance with the first sentence of this Section 25 and (B) written documentation supporting its position with respect to such dispute, in each case, no later than 5:00 p.m. (New York time) by the fifth (5th) Business Day immediately following the date on which such Holder selected such investment bank (the "**Dispute Submission Deadline**") (the documents referred to in the immediately preceding clauses (A) and (B) are collectively referred to herein as the "**Required Dispute Documentation**") (it being understood and agreed that if either such Holder or the Company fails to so deliver all of the Required Dispute Documentation by the Dispute Submission Deadline, then the party who fails to so submit all of the Required Dispute Documentation shall no longer be entitled to (and hereby waives its right to) deliver or submit any written documentation or other support to such investment bank with respect to such dispute and such investment bank shall resolve such dispute based solely on the Required Dispute Documentation that was delivered to such investment bank prior to the Dispute Submission Deadline). Unless otherwise agreed to in writing by both the Company and such Holder or otherwise requested by such investment bank, neither the Company nor such Holder shall be entitled to deliver or submit any written documentation or other support to such investment bank in connection with such dispute (other than the Required Dispute Documentation).

(iii) The Company and such Holder shall cause such investment bank to determine the resolution of such dispute and notify the Company and such Holder of such resolution no later than ten (10) Business Days immediately following the Dispute Submission Deadline. The fees and expenses of such investment bank shall be borne solely by the Company, and such investment bank's resolution of such dispute shall be final and binding upon all parties absent manifest error.

(b) Miscellaneous. The Company expressly acknowledges and agrees that (i) this Section 25 constitutes an agreement to arbitrate between the Company and each Holder (and constitutes an arbitration agreement) under § 7501, et seq. of the New York Civil Practice Law and Rules ("**CPLR**") and that any Holder is authorized to apply for an order to compel arbitration pursuant to CPLR § 7503(a) in order to compel compliance with this Section 25, (ii) a dispute relating to a Conversion Price includes, without limitation, disputes as to (A) whether an issuance or sale or deemed issuance or sale of Common Stock occurred under Section 8(a), (B) the consideration per share at which an issuance or deemed issuance of Common Stock occurred, (C) whether any issuance or sale or deemed issuance or sale of Common Stock was an issuance or sale or deemed issuance or sale of Excluded Securities, (D) whether an agreement, instrument, security or the like constitutes and Option or Convertible Security and (E) whether a Dilutive Issuance occurred, (iii) the terms of this Certificate of Designations and each other applicable Transaction Document shall serve as the basis for the selected investment bank's resolution of the applicable dispute, such investment bank shall be entitled (and is hereby expressly authorized) to make all findings, determinations and the like that such investment bank determines are required to be made by such investment bank in connection with its resolution of such dispute and in resolving such dispute such investment bank shall apply such findings, determinations and the like to the terms of this Certificate of Designations and any other applicable Transaction Documents, (iv) the applicable Holder (and only such Holder with respect to disputes solely relating to such Holder), in its sole discretion, shall have the right to submit any dispute described in this Section 25 to any state or federal court sitting in The City of New York, Borough of Manhattan in lieu of utilizing the procedures set forth in this Section 25 and (v) nothing in this Section 25 shall limit such Holder from obtaining any injunctive relief or other equitable remedies (including, without limitation, with respect to any matters described in this Section 25).

25. Notices; Currency; Payments.

(a) Notices. The Company shall provide each Holder of Preferred Shares with prompt written notice of all actions taken pursuant to the terms of this Certificate of Designations, including in reasonable detail a description of such action and the reason therefor. Whenever notice is required to be given under this Certificate of Designations, unless otherwise provided herein, such notice must be in writing and shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide each Holder with prompt written notice of all actions taken pursuant to this Certificate of Designations, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company shall give written notice to each Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any grant, issuances, or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to such Holder.

(b) Currency. All dollar amounts referred to in this Certificate of Designations are in United States Dollars (“**U.S. Dollars**”), and all amounts owing under this Certificate of Designations shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. “**Exchange Rate**” means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Certificate of Designations, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation (it being understood and agreed that where an amount is calculated with reference to, or over, a period of time, the date of calculation shall be the final date of such period of time).

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(c) Payments. Whenever any payment of cash is to be made by the Company to any Person pursuant to this Certificate of Designations, unless otherwise expressly set forth herein, such payment shall be made in lawful money of the United States of America by wire transfer of immediately available funds pursuant to wire transfer instructions that Holder shall provide to the Company in writing from time to time. Whenever any amount expressed to be due by the terms of this Certificate of Designations 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. Any amount due under the Transaction Documents which is not paid when due (except to the extent such amount is simultaneously accruing Dividends at the Default Rate hereunder) shall result in a late charge being incurred and payable by the Company in an amount equal to interest on such amount at the rate of fifteen percent (15%) per annum from the date such amount was due until the same is paid in full (“**Late Charge**”).

26. Waiver of Notice. To the extent permitted by law, the Company hereby irrevocably waives demand, notice, presentment, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Certificate of Designations and the Securities Purchase Agreement.

27. Governing Law. This Certificate of Designations shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Certificate of Designations shall be governed by, the internal laws of the State of Delaware, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Delaware or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Delaware. Except as otherwise required by Section 25 above, the Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein (i) shall be deemed to operate to preclude any Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company’s obligations to such Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of such Holder or (ii) shall limit, or shall be deemed or construed to limit, any provision of Section 25 above. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS CERTIFICATE OF DESIGNATIONS OR ANY TRANSACTION CONTEMPLATED HEREBY.**

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28. Judgment Currency.

(a) If for the purpose of obtaining or enforcing judgment against the Company in any court in any jurisdiction it becomes necessary to convert into any other currency (such other currency being hereinafter in this Section 29 referred to as the “**Judgment Currency**”) an amount due in U.S. dollars under this Certificate of Designations, the conversion shall be made at the Exchange Rate prevailing on the Trading Day immediately preceding:

(i) the date actual payment of the amount due, in the case of any proceeding in the courts of New York or in the courts of any other jurisdiction that will give effect to such conversion being made on such date: or

(ii) the date on which the foreign court determines, in the case of any proceeding in the courts of any other jurisdiction (the date as of which such conversion is made pursuant to this Section 29(a)(ii) being hereinafter referred to as the “**Judgment Conversion Date**”).

(b) If in the case of any proceeding in the court of any jurisdiction referred to in Section 29(a)(ii) above, there is a change in the Exchange Rate prevailing between the Judgment Conversion Date and the date of actual payment of the amount due, the applicable party shall pay such adjusted amount as may be necessary to ensure that the amount paid in the Judgment Currency, when converted at the Exchange Rate prevailing on the date of payment, will produce the amount of US dollars which could have been purchased with the amount of Judgment Currency stipulated in the judgment or judicial order at the Exchange Rate prevailing on the Judgment Conversion Date.

(c) Any amount due from the Company under this provision shall be due as a separate debt and shall not be affected by judgment being obtained for any other amounts due under or in respect of this Certificate of Designations.

29. Severability. If any provision of this Certificate of Designations is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Certificate of Designations so long as this Certificate of Designations as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

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30. Maximum Payments. Without limiting Section 9(d) of the Securities Purchase Agreement, nothing contained herein shall be deemed to establish or require the

payment of a rate of interest or other charges in excess of the maximum permitted by applicable law. In the event that the rate of interest required to be paid or other charges hereunder exceed the maximum permitted by such law, any payments in excess of such maximum shall be credited against amounts owed by the Company to the applicable Holder and thus refunded to the Company.

31. Stockholder Matters; Amendment

(a) Stockholder Matters. Any stockholder action, approval or consent required, desired or otherwise sought by the Company pursuant to the DGCL, the Certificate of Incorporation, this Certificate of Designations or otherwise with respect to the issuance of Preferred Shares may be effected by written consent of the Company's stockholders or at a duly called meeting of the Company's stockholders, all in accordance with the applicable rules and regulations of the DGCL. This provision is intended to comply with the applicable sections of the DGCL permitting stockholder action, approval and consent affected by written consent in lieu of a meeting.

(b) Amendment. Except for Section 4(d)(i), which may not be amended or waived hereunder, this Certificate of Designations or any provision hereof may be amended by obtaining the affirmative vote at a meeting duly called for such purpose, or written consent without a meeting in accordance with the DGCL, of the Required Holders, voting separately as a single class, and with such other stockholder approval, if any, as may then be required pursuant to the DGCL and the Certificate of Incorporation.

32. Certain Defined Terms. For purposes of this Certificate of Designations, the following terms shall have the following meanings:

(a) "**1934 Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

(b) "**Additional Amount**" means, as of the applicable date of determination, with respect to each Preferred Share, all accrued and unpaid Dividends on such Preferred Share.

(c) "**Adjustment Right**" means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale in accordance with Section 8(a) of shares of Common Stock (other than rights of the type described in Section 7(a) hereof) that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(d) "**Affiliate**" or "**Affiliated**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

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(e) "**Approved Stock Plan**" means any employee benefit plan or agreement which has been approved by the Board prior to or subsequent to the Subscription Date pursuant to which shares of Common Stock and standard options to purchase Common Stock may be issued to any employee, officer, consultant or director for services provided to the Company in their capacity as such.

(f) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Initial Issuance Date, directly or indirectly managed or advised by a Holder's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of such Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with such Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with such Holder's and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively such Holder and all other Attribution Parties to the Maximum Percentage.

(g) "**Bloomberg**" means Bloomberg, L.P.

(h) "**Book-Entry**" means each entry on the Register evidencing one or more Preferred Shares held by a Holder in lieu of a Preferred Share Certificate issuable hereunder.

(i) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to "stay at home", "shelter-in-place", "non-essential employee" or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(j) "**Change of Control**" means any Fundamental Transaction other than (i) any merger of the Company or any of its, direct or indirect, wholly-owned Subsidiaries with or into any of the foregoing Persons, (ii) any reorganization, recapitalization or reclassification of the Common Stock in which holders of the Company's voting power immediately prior to such reorganization, recapitalization or reclassification continue after such reorganization, recapitalization or reclassification to hold publicly traded securities and, directly or indirectly, are, in all material respects, the holders of the voting power of the surviving entity (or entities with the authority or voting power to elect the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities) after such reorganization, recapitalization or reclassification, (iii) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company or any of its Subsidiaries or (iv) bona fide arm's length sales or acquisitions by the Company with one or more third parties as long as holders of the Company's voting power as of the Issuance Date continue after such sale or acquisition to hold publicly traded securities and, directly or indirectly, are, in all material respects, the holders of at least 51% of the voting power of the surviving entity (or entities with the authority or voting power to elect the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities) after such sale or acquisition.

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(k) "**Change of Control Redemption Premium**" means 150%.

(l) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price (as the case may be) then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price (as the case may be)

of such security on such date shall be the fair market value as mutually determined by the Company and the Required Holder. If the Company and the Required Holders are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 25. All such determinations shall be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during such period.

(m) “**Closing Date**” shall have the meaning set forth in the Securities Purchase Agreement, which date is the date the Company initially issued the Preferred Shares and the Warrants pursuant to the terms of the Securities Purchase Agreement.

(n) “**Common Stock**” means (i) the Company’s shares of common stock, par value \$0.001 per share, and (ii) any capital stock into which such common stock shall have been changed or any share capital resulting from a reclassification of such common stock.

(o) “**Contingent Obligation**” means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any Indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

(p) “**Convertible Securities**” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any shares of Common Stock.

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(q) “**Dividend Date**” means the first Trading Day of each calendar month.

(r) “**Dividend Rate**” means ten percent (10.0%) per annum, as may be adjusted from time to time in accordance with Section 2.

(s) “**Eligible Market**” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the OTCQX, the OTCQB or the Principal Market.

(t) “**Event Market Price**” means, with respect to any Stock Combination Event Date, the quotient determined by dividing (x) the sum of the VWAP of the Common Stock for each of the five (5) lowest Trading Days during the twenty (20) consecutive Trading Day period ending and including the Trading Day immediately preceding the sixteenth (16th) Trading Day after such Stock Combination Event Date, divided by (y) five (5).

(u) “**Excluded Securities**” means (i) shares of Common Stock or standard options to purchase Common Stock issued or issuable to directors, officers, employees or other service providers of the Company for services rendered to the Company in their capacity as such pursuant to an Approved Stock Plan, provided that (A) all such issuances (taking into account the shares of Common Stock issuable upon exercise of such awards) after the Subscription Date pursuant to this clause (i) do not, in the aggregate, exceed more than 10% of the Common Stock issued and outstanding as of the date of such issuance and (B) the exercise price of any such options is not lowered and none of such options are amended to increase the number of shares issuable thereunder; (ii) shares of Common Stock issued or issuable upon the conversion or exercise of Convertible Securities (other than shares of Common Stock issued or issuable pursuant to an Approved Stock Plan that are covered by clause (i) above) issued prior to the Subscription Date, provided that the conversion price of any such Convertible Securities (other than standard options to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (i) above) is not lowered (other than in accordance with the terms thereof in effect as of the Subscription Date) from the conversion price in effect as of the Subscription Date (whether pursuant to the terms of such Convertible Securities or otherwise), none of such Convertible Securities (other than those issued pursuant to an Approved Stock Plan that are covered by clause (i) above) are amended to increase the number of shares issuable thereunder and none of the terms or conditions of any such Convertible Securities (other than those issued pursuant to an Approved Stock Plan that are covered by clause (i) above) are otherwise materially changed in any manner that adversely affects any of the Buyers; (iii) the shares of Common Stock issuable upon conversion of the Preferred Shares or otherwise pursuant to the terms of this Certificate of Designations; (iv) the shares of Common Stock issuable upon exercise of the Warrants; and, (v) securities issued as consideration for the acquisition of another entity by the Company by merger, purchase of substantially all of the assets or other reorganization or bona fide joint venture agreement, provided that such issuance is approved by the majority of the disinterested directors of the Company and provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the Restricted Period (as defined in the Securities Purchase Agreement) and such issuance does not, in the aggregate, exceed more than 5% of the shares of Common Stock issued and outstanding immediately prior to the Subscription Date.

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(v) “**Floor Price**” means the lower of (x) \$0.4506 and (y) 20% of the “Minimum Price” (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) on the Stockholder Approval Date (as defined in the Securities Purchase Agreement) (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) or, in any case, such lower amount as permitted, from time to time, by the Principal Market.

(w) “**Fundamental Transaction**” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, in any transaction or series of related transactions, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the date of this Certificate of Designations calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and

(x) “**GAAP**” means United States generally accepted accounting principles, consistently applied.

(y) “**Group**” means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(z) “**Holder Pro Rata Amount**” means, with respect to any Holder, a fraction (i) the numerator of which is the number of Preferred Shares issued to such Holder pursuant to the Securities Purchase Agreement on the Initial Issuance Date and (ii) the denominator of which is the number of Preferred Shares issued to all Holders pursuant to the Securities Purchase Agreement on the Initial Issuance Date.

(aa) “**Indebtedness**” means of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services, including, without limitation, “capital leases” in accordance with United States generally accepted accounting principles consistently applied for the periods covered thereby (other than trade payables entered into in the ordinary course of business consistent with past practice), (C) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with United States generally accepted accounting principles, consistently applied for the periods covered thereby, is classified as a capital lease, (G) all indebtedness referred to in clauses (A) through (F) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, deed of trust, lien, pledge, charge, security interest or other encumbrance of any nature whatsoever in or upon any property or assets (including accounts and contract rights) with respect to any asset or property owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (H) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (G) above.

(bb) “**Intellectual Property Rights**” means, with respect to the Company and its Subsidiaries, all of their rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, original works of authorship, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and other intellectual property rights and all applications and registrations therefor.

(cc) “**Investment**” means any beneficial ownership (including stock, partnership or limited liability company interests) of or in any Person, or any loan, advance or capital contribution to any Person or the acquisition of all, or substantially all, of the assets of another Person or the purchase of any assets of another Person for greater than the fair market value of such assets.

(dd) “**Liquidation Event**” means, whether in a single transaction or series of transactions, the voluntary or involuntary liquidation, dissolution or winding up of the Company or such Subsidiaries the assets of which constitute all or substantially all of the assets of the business of the Company and its Subsidiaries, taken as a whole.

(ee) “**Make-Whole Amount**” means, as of any given date and as applicable, in connection with any conversion, redemption or other repayment hereunder, an amount equal to the amount of additional Dividends that would accrue under this Certificate of Designations at the Dividend Rate then in effect assuming for calculation purposes that the Stated Value of this Certificate of Designations as of the Closing Date remained outstanding through and including the date of conversion of all the Preferred Shares.

(ff) “**Material Adverse Effect**” means any material adverse effect on the business, properties, assets, liabilities, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its Subsidiaries, if any, individually or taken as a whole, or on the transactions contemplated hereby or on the other Transaction Documents (as defined below), or by the agreements and instruments to be entered into in connection therewith or on the authority or ability of the Company to perform its obligations under the Transaction Documents.

(gg) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(hh) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(ii) “**Permitted Indebtedness**” means (i) Indebtedness existing on December 31, 2023 and reflected on the Company’s balance sheet included in the Company’s Annual Report on Form 10-K filed with the SEC on April 8, 2024, and (ii) Indebtedness secured by Permitted Liens or unsecured but as described in clauses (iv) and (v) of the definition of Permitted Liens.

(jj) “**Permitted Liens**” means (i) any Lien for taxes not yet due or delinquent or being contested in good faith by appropriate proceedings for which adequate reserves have been established in accordance with GAAP, (ii) any statutory Lien arising in the ordinary course of business by operation of law with respect to a liability that is not yet due or delinquent, (iii) any Lien created by operation of law, such as materialmen’s liens, mechanics’ liens and other similar liens, arising in the ordinary course of business with respect to a liability that is not yet due or delinquent or that are being contested in good faith by appropriate proceedings, (iv) Liens (A) upon or in any equipment acquired or held by the Company or any of its Subsidiaries to secure the purchase price of such equipment or Indebtedness incurred solely for the purpose of financing the acquisition or lease of such equipment, or (B) existing on such equipment at the time of its acquisition, provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such equipment, in either case, with respect to Indebtedness in an aggregate amount not to exceed \$100,000, (v) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clause (iv) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced does not increase, (vi) Liens in favor of customs and revenue authorities arising as a matter of law to secure payments of custom duties in connection with the importation of goods, and (vii) Liens arising from judgments, decrees or attachments in circumstances not constituting a Triggering Event under Section 5(a)(vii).

(kk) **Reserved.**

(ll) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity or a government or any department or agency thereof.

(mm) “**Principal Market**” means the Nasdaq Capital Market.

(nn) **“Redemption Notices”** means, collectively, the Triggering Events Redemption Notices, the Maturity Redemption Notice and the Change of Control Redemption Notices, and each of the foregoing, individually, a **“Redemption Notice.”**

(oo) **“Redemption Premium”** means 130%.

(pp) **“Redemption Prices”** means, collectively, any Triggering Event Redemption Price, Change of Control Redemption Price, and Maturity Redemption Price (including in each case any interest, damages and Make-Whole Amount thereon), and each of the foregoing, individually, a **“Redemption Price.”**

(qq) **“SEC”** means the United States Securities and Exchange Commission or the successor thereto.

(rr) **“Securities Purchase Agreement”** means that certain securities purchase agreement by and among the Company and the initial holders of Preferred Shares, dated as of the Subscription Date, as may be amended from time to time in accordance with the terms thereof.

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(ss) **“Stated Value”** shall mean \$1,000 per share, subject to adjustment for stock splits, stock dividends, recapitalizations, reorganizations, reclassifications, combinations, subdivisions or other similar events occurring after the Initial Issuance Date with respect to the Preferred Shares.

(tt) **“Subscription Date”** means May 20, 2024.

(uu) **“Subject Entity”** means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(vv) **“Subsidiaries”** shall have the meaning as set forth in the Securities Purchase Agreement.

(ww) **“Successor Entity”** means the Person (or, if so elected by the Required Holders, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Required Holders, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(xx) **“Trading Day”** means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the applicable Holder or (y) with respect to all determinations other than price determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(yy) **“Transaction Documents”** means the Securities Purchase Agreement, this Certificate of Designations, the Warrants and each of the other agreements and instruments entered into or delivered by the Company or any of the Holders in connection with the transactions contemplated by the Securities Purchase Agreement, all as may be amended from time to time in accordance with the terms thereof.

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(zz) **“VWAP”** means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded), during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg through its “VAP” function (set to 09:30 start time and 16:00 end time) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Required Holders. If the Company and the Required Holders are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 25. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

(aaa) **“Warrants”** has the meaning ascribed to such term in the Securities Purchase Agreement, and shall include all warrants issued in exchange therefor or replacement thereof.

(bbb) **“Warrant Shares”** means, collectively, the shares of Common Stock issuable upon exercise of the Warrants.

33. **Disclosure.** Upon receipt or delivery by the Company of any notice in accordance with the terms of this Certificate of Designations, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall on or prior to 9:00 am, New York city time on the Business Day immediately following such notice delivery date, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its Subsidiaries, the Company so shall indicate to the Holder explicitly in writing in such notice (or immediately upon receipt of notice from such Holder, as applicable), and in the absence of any such written indication in such notice (or notification from the Company immediately upon receipt of notice from such Holder), such Holder shall be entitled to presume that information contained in the notice does not constitute material, non-public information relating to the Company or any of its Subsidiaries. Nothing contained in this Section 34 shall limit any obligations of the Company, or any rights of any Holder, under Section 4(l) of the Securities Purchase Agreement.

34. **Non-circumvention.** The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation (as defined in the Securities Purchase Agreement), Bylaws (as defined in the Securities Purchase Agreement) 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 Certificate of Designations, and will at all times in good faith carry out all the provisions of this Certificate of Designations and take all action as may be required to protect the rights of the Holders hereunder. Without limiting the generality of the foregoing or any other provision of this Certificate of Designations or the other Transaction Documents, the Company (a) shall not increase the par value of any shares of Common Stock receivable upon the conversion of any Preferred Shares above the Conversion Price then in effect, (b) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable shares of Common Stock upon the conversion of Preferred Shares and (c) shall, so long as any Preferred Shares are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the conversion of the Preferred Shares, the maximum number of shares of Common Stock as shall from time to time be necessary to effect the conversion of the Preferred Shares then outstanding (without regard to any limitations on conversion contained herein). Notwithstanding anything herein to the contrary, if after the ninety (90) calendar day anniversary of the Initial Issuance Date, each Holder is not permitted to convert such Holder's Preferred Shares in full for any reason (other than pursuant to restrictions set forth in Section 4(d)(i) hereof), the Company shall use its best efforts to promptly remedy such failure, including, without limitation, obtaining such consents or approvals as necessary to effect such conversion into shares of Common Stock.

35. **Absence of Trading and Disclosure Restrictions.** The Company acknowledges and agrees that no Holder is a fiduciary or agent of the Company and that each Holder shall have no obligation to (a) maintain the confidentiality of any information provided by the Company or (b) refrain from trading any securities while in possession of such information in the absence of a written non-disclosure agreement signed by an officer of such Holder that explicitly provides for such confidentiality and trading restrictions. In the absence of such an executed, written non-disclosure agreement, the Company acknowledges that each Holder may freely trade in any securities issued by the Company, may possess and use any information provided by the Company in connection with such trading activity, and may disclose any such information to any third party.

* * * * *

IN WITNESS WHEREOF, the Company has caused this Certificate of Designations of Series G Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. to be signed by its President on this ____ day of May, 2024.

MyMD PHARMACEUTICALS, INC.

By: _____
Name: _____
Title: _____

Signature Page to Certificate of Designations

EXHIBIT I

**MyMD PHARMACEUTICALS, INC.
CONVERSION NOTICE**

Reference is made to the Certificate of Designations, Preferences and Rights of the Series G Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. (the "**Certificate of Designations**"). In accordance with and pursuant to the Certificate of Designations, the undersigned hereby elects to convert the number of shares of Series G Convertible Preferred Stock, par value \$0.001 per share (the "**Preferred Shares**"), of MyMD Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), indicated below into shares of common stock, par value \$0.001 per share (the "**Common Stock**"), of the Company, as of the date specified below.

Date of Conversion: _____

Aggregate number of Preferred Shares to be converted: _____

Aggregate Stated Value of such Preferred Shares to be converted: _____

Aggregate accrued and unpaid Dividends and accrued and unpaid Late Charges with respect to such Preferred Shares and such Aggregate Dividends to be converted: _____

AGGREGATE CONVERSION AMOUNT TO BE CONVERTED: _____

Please confirm the following information:

Conversion Price: _____

Number of shares of Common Stock to be issued: _____

Please issue the Common Stock into which the applicable Preferred Shares are being converted to Holder, or for its benefit, as follows:

Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: _____

Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant: _____

DTC Number: _____

Account Number: _____

Date: _____, _____

Name of Registered Holder

By: _____

Name: _____

Title: _____

Tax ID: _____

E-mail Address: _____

Exhibit I

EXHIBIT II

ACKNOWLEDGMENT

The Company hereby (a) acknowledges this Conversion Notice, (b) certifies that the above indicated number of shares of Common Stock are eligible to be resold by the Holder without restriction or any legend and (c) hereby directs _____ to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated May ___, 2024 from the Company and acknowledged and agreed to by _____.

MyMD PHARMACEUTICALS, INC.

By: _____

Name: _____

Title: _____

Exhibit II

**CERTIFICATE OF DESIGNATIONS OF
SERIES F-1 CONVERTIBLE PREFERRED STOCK OF
MyMD PHARMACEUTICALS, INC.**

I, Christopher Chapman, M.D., hereby certify that I am the President of MyMD Pharmaceuticals, Inc. (the **Company**), a corporation organized and existing under the Delaware General Corporation Law (the **“DGCL”**), and further do hereby certify:

That pursuant to the authority expressly conferred upon the Board of Directors of the Company (the **“Board”**) by the Company’s Certificate of Incorporation (the **“Certificate of Incorporation”**), and Section 151(g) of the DGCL, on May 20, 2024, the Board adopted the following resolution determining it desirable and in the best interests of the Company and its stockholders for the Company to create a series of five thousand fifty (5,050) shares of preferred stock designated as **“Series F-1 Convertible Preferred Stock”**, none of which shares have been issued:

RESOLVED, that pursuant to the authority vested in the Board, in accordance with the provisions of the Certificate of Incorporation, a series of preferred stock, par value \$0.001 per share, of the Company be and hereby is created, and that the designation and number of shares thereof and the voting and other powers, preferences and relative, participating, optional or other rights of the shares of such series and the qualifications, limitations and restrictions thereof are as follows:

TERMS OF SERIES F-1 CONVERTIBLE PREFERRED STOCK

1. **Designation and Number of Shares.** There shall hereby be created and established a series of preferred stock of the Company designated as “Series F-1 Convertible Preferred Stock” (the **“Preferred Shares”**). The authorized number of Preferred Shares shall be five thousand fifty (5,050). Each Preferred Share shall have a par value equal to \$0.001 per share. Capitalized terms not defined herein shall have the meaning as set forth in Section 33 below.

2. **Ranking.** Except to the extent that the holders of at least a majority of the outstanding Preferred Shares (the **“Required Holders”**) expressly consent to the creation of Parity Stock (as defined below) or Senior Preferred Stock (as defined below) in accordance with Section 18, all shares of capital stock of the Company shall be junior in rank to all Preferred Shares with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company (such junior stock is referred to herein collectively as **“Junior Stock”**). The rights of all such shares of capital stock of the Company shall be subject to the rights, powers, preferences and privileges of the Preferred Shares. Without limiting any other provision of this Certificate of Designations, without the prior express consent of the Required Holders, voting separately as a single class, the Company shall not hereafter authorize or issue any additional or other shares of capital stock that are (i) of senior rank to the Preferred Shares in respect of the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company (collectively, the **“Senior Preferred Stock”**), (ii) of pari passu rank to the Preferred Shares in respect of the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company (collectively, the **“Parity Stock”**) or (iii) any Junior Stock having a maturity date or any other date requiring redemption or repayment of such shares of Junior Stock that is prior to the Maturity Date. Notwithstanding the foregoing, the Company’s issuance of the Series G Convertible Preferred Stock, par value \$0.001 per share (the **“Series G Preferred Stock”**), pursuant to that certain Certificate of Designations establishing the rights, preferences, restrictions and other matters relating to the Series G Preferred Stock, shall not require the consent of the Required Holders pursuant to this Section 2. Further to the foregoing, the Preferred Shares shall rank (i) pari passu to such shares of Series G Preferred Stock and (ii) junior to shares of Series F Convertible Preferred Stock, par value \$0.001 per share, issued and outstanding pursuant to that certain Amended and Restated Certificate of Designations establishing the rights, preferences, restrictions and other matters relating to the Series F Preferred Stock, in each case, with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company. In the event of the merger or consolidation of the Company with or into another corporation, the Preferred Shares shall maintain their relative rights, powers, designations, privileges and preferences provided for herein and no such merger or consolidation shall be consummated if it would result in the Preferred Shares being treated in any manner inconsistently with the foregoing.

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3. **Dividends and Payments.**

(a) From and after the first date of issuance of any Preferred Shares (the **“Initial Issuance Date”**), each holder of a Preferred Share (each, a **“Holder”** and collectively, the **“Holders”**) shall be entitled to receive dividends on the Stated Value of the Preferred Shares (**“Dividends”**) at the Dividend Rate computed on the basis of a 360-day year and twelve 30-day months and shall be payable in arrears monthly on each Dividend Date and shall compound each calendar month and shall be payable in funds legally available therefor or, in connection with an Installment Conversion (as defined below) pursuant to Section 9, shares of Common Stock. Dividends shall be paid (i) on each Dividend Date occurring on an Installment Date in accordance with Section 9 as part of the applicable Installment Amount due on the applicable Installment Date if not paid in funds legally available therefor or shares of Common Stock as provided in Section 9 and (ii) with respect to each other Dividend Date not occurring on an Installment Date, on such Dividend Date in funds legally available therefor.

(b) Prior to the payment of Dividends on a Dividend Date, Dividends shall be payable by way of inclusion of the Dividends in the Conversion Amount on each Conversion Date in accordance with Section 4(b)(i) or upon any redemption in accordance with Section 12 or any required payment upon any Triggering Event. From and after the occurrence and during the continuance of any Triggering Event, Dividends shall accrue on the Stated Value each Preferred Share at fifteen percent (15.0%) per annum (the **“Default Rate”**) and shall be computed on the basis of a 360-day year and twelve 30-day months.

(c) On each Installment Date, the Company shall pay to the Holder an amount equal to the Installment Amount due on such Installment Date in accordance with Section 9. On the Maturity Date, the Company shall pay to the Holder an amount in funds legally available therefor (excluding any amounts paid in shares of Common Stock on the Maturity Date in accordance with Section 9) representing all outstanding Preferred Shares, accrued and unpaid Dividends and unpaid Late Charges. Other than as specifically permitted hereunder, the Company may not prepay any portion of the aggregate Stated Value underlying outstanding Preferred Shares, accrued and unpaid Dividends or accrued and unpaid Late Charges.

4. **Conversion.** At any time after the Initial Issuance Date, each Preferred Share shall be convertible into validly issued, fully paid and non-assessable shares of Common Stock (as defined below), on the terms and conditions set forth in this Section 4.

(a) **Holder’s Conversion Right.** Subject to the provisions of Section 4(d), at any time or times on or after the Initial Issuance Date, each Holder shall be entitled to convert any portion of the outstanding Preferred Shares held by such Holder into validly issued, fully paid and non-assessable shares of Common Stock in accordance with Section 4(c) at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Transfer Agent (as defined below)) that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Preferred Shares.

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(b) **Conversion Rate.** The number of shares of Common Stock issuable upon conversion of any Preferred Share pursuant to Section 4(a) shall be determined by dividing (x) the Conversion Amount of such Preferred Share by (y) the Conversion Price (the **“Conversion Rate”**):

(i) **“Conversion Amount”** means, with respect to each Preferred Share, as of the applicable date of determination, the sum of (1) the Stated Value thereof plus (2) the Make-Whole Amount, (3) the Additional Amount thereon and any accrued and unpaid Late Charges (as defined below in Section 26(c)) with respect to such Stated Value and Additional Amount as of such date of determination.

(ii) **“Conversion Price”** means, with respect to each Preferred Share, as of any Conversion Date or other date of determination, \$1.816, subject to adjustment as provided herein.

(c) **Mechanics of Conversion.** The conversion of each Preferred Share shall be conducted in the following manner:

(i) **Optional Conversion.** To convert a Preferred Share into shares of Common Stock on any date (a **“Conversion Date”**), a Holder shall deliver (whether via electronic mail or otherwise), for receipt on or prior to 11:59 p.m., New York time, on such date, a copy of an executed notice of conversion of the share(s) of Preferred Shares subject to such conversion in the form attached hereto as **Exhibit I** (the **“Conversion Notice”**) to the Company. If required by Section 4(c)(iii), within two (2) Trading Days following a conversion of any such Preferred Shares as aforesaid, such Holder shall surrender to a nationally recognized overnight delivery service for delivery to the Company the original certificates, if any, representing the Preferred Shares (the **“Preferred Share Certificates”**) so converted as aforesaid (or an indemnification undertaking with respect to the Preferred Shares in the case of its loss, theft or destruction as contemplated by Section 20(b)). On or before the first (1st) Trading Day following the date of receipt of a Conversion Notice, the Company shall transmit by electronic mail an acknowledgment of confirmation, in the form attached hereto as **Exhibit II**, of receipt of such Conversion Notice to such Holder and the Company’s transfer agent (the **“Transfer Agent”**), which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein. On or before the first (1st) Trading Day following each date on which the Company has received a Conversion Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade initiated on the applicable Conversion Date of such shares of Common Stock issuable pursuant to such Conversion Notice) (the **“Share Delivery Deadline”**), the Company shall (1) provided that the Transfer Agent is participating in The Depository Trust Company’s (**“DTC”**) Fast Automated Securities Transfer Program (**“FAST”**), credit such aggregate number of shares of Common Stock to which such Holder shall be entitled pursuant to such conversion to such Holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal at Custodian system, or (2) if the Transfer Agent is not participating in FAST, upon the request of such Holder, issue and deliver (via reputable overnight courier) to the address as specified in such Conversion Notice, a certificate, registered in the name of such Holder or its designee, for the number of shares of Common Stock to which such Holder shall be entitled. If the number of Preferred Shares represented by the Preferred Share Certificate(s) submitted for conversion pursuant to Section 4(c)(iii) is greater than the number of Preferred Shares being converted, then the Company shall, as soon as practicable and in no event later than one (1) Trading Day after receipt of the Preferred Share Certificate(s) and at its own expense, issue and deliver to such Holder (or its designee) a new Preferred Share Certificate or a new Book-Entry (in either case, accordance with Section 20(d)) representing the number of Preferred Shares not converted. The Person or Persons entitled to receive the shares of Common Stock issuable upon a conversion of Preferred Shares shall be treated for all purposes as the record holder or holders of such shares of Common Stock on the Conversion Date. In connection with any conversion of Preferred Shares by a Holder, the number of Preferred Shares converted by such Holder shall be deducted from the Installment Amount(s) of such Holder relating to the Installment Date(s) as set forth in the applicable Conversion Notice. Notwithstanding the foregoing, with respect to any Conversion Notice delivered by a Buyer (as defined in the Securities Purchase Agreement) to the Company on or prior to 4:00 p.m. (New York City time) on the Trading Day immediately prior to the date of initial issuance of such applicable Preferred Shares to be converted pursuant to such Conversion Notice (each, an **“Issuance Date”**), which may be delivered at any time after the time of execution of the Securities Purchase Agreement, the Company agrees to deliver the shares of Common Stock issuable upon conversion of such Preferred Shares to be issued on such date subject to such notice(s) by 4:00 p.m. (New York City time) on such applicable Issuance Date and such Issuance Date shall be the Share Delivery Date for purposes hereunder with respect to such Conversion Notice.

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(ii) **Company’s Failure to Timely Convert.** If the Company shall fail, for any reason or for no reason, on or prior to the applicable Share Delivery Deadline, if the Transfer Agent is not participating in FAST, to issue and deliver to such Holder (or its designee) a certificate for the number of shares of Common Stock to which such Holder is entitled and register such shares of Common Stock on the Company’s share register or, if the Transfer Agent is participating in FAST, to credit such Holder’s or its designee’s balance account with DTC for such number of shares of Common Stock to which such Holder is entitled upon such Holder’s conversion of any Conversion Amount (as the case may be) (a **“Conversion Failure”**), then, in addition to all other remedies available to such Holder, (X) the Company shall pay in cash from funds legally available therefor to such Holder on each day after the Share Delivery Deadline that the issuance of such shares of Common Stock is not timely effected an amount equal to 1% of the product of (A) the sum of the number of shares of Common Stock not issued to such Holder on or prior to the Share Delivery Deadline and to which such Holder is entitled, multiplied by (B) any trading price of the Common Stock selected by such Holder in writing as in effect at any time during the period beginning on the applicable Conversion Date and ending on the applicable Share Delivery Deadline, and (Y) such Holder, upon written notice to the Company, may void its Conversion Notice with respect to, and retain or have returned, as the case may be, all, or any portion, of such Preferred Shares that has not been converted pursuant to such Conversion Notice; provided that the voiding of a Conversion Notice shall not affect the Company’s obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 4(c)(ii) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Deadline the Transfer Agent is not participating in FAST, the Company shall fail to issue and deliver to such Holder (or its designee) a certificate and register such shares of Common Stock on the Company’s share register or, if the Transfer Agent is participating in FAST, the Transfer Agent shall fail to credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of shares of Common Stock to which such Holder is entitled upon such Holder’s conversion hereunder or pursuant to the Company’s obligation pursuant to clause (ii) below, and if on or after such Share Delivery Deadline such Holder acquires (in an open market transaction, stock loan or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such conversion that such Holder is entitled to receive from the Company and has not received from the Company in connection with such Conversion Failure (a **“Buy-In”**), then, in addition to all other remedies available to such Holder, the Company shall, within two (2) Business Days after receipt of such Holder’s request and in such Holder’s discretion, either: (I) pay cash from funds legally available therefor to such Holder in an amount equal to such Holder’s total purchase price (including brokerage commission, stock loan costs and other out-of-pocket expenses, if any) for the shares of Common Stock so acquired (including, without limitation, by any other Person in respect, or on behalf, of such Holder) (the **“Buy-In Price”**), at which point the Company’s obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit to the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of shares of Common Stock to which such Holder is entitled upon such Holder’s conversion hereunder (as the case may be) (and to issue such shares of Common Stock) shall terminate, or (II) promptly honor its obligation to so issue and deliver to such Holder a certificate or certificates representing such shares of Common Stock or credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of shares of Common Stock to which such Holder is entitled upon such Holder’s conversion hereunder (as the case may be) and pay cash from funds legally available therefor to such Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (x) such number of shares of Common Stock multiplied by (y) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Conversion Notice and ending on the date of such issuance and payment under this clause (II). Nothing herein shall limit a Holder’s right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the conversion of the Preferred Shares as required pursuant to the terms hereof. Notwithstanding anything herein to the contrary, with respect to any given Conversion Failure, this Section 4(c)(ii) shall not apply to a Holder to the extent the Company has already paid such amounts in full to such Holder with respect to such Conversion Failure, as applicable, pursuant to the analogous sections of the Securities Purchase Agreement.

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(iii) **Registration: Book-Entry.** At the time of issuance of any Preferred Shares hereunder, the applicable Holder may, by written request (including by electronic-mail) to the Company, elect to receive such Preferred Shares in the form of one or more Preferred Share Certificates or in Book-Entry form. The Company (or the Transfer Agent, as custodian for the Preferred Shares) shall maintain a register (the **“Register”**) for the recordation of the names and addresses of the Holders of each Preferred Share and the Stated Value of the Preferred Shares and whether the Preferred Shares are held by such Holder in Preferred Share Certificates or in Book-Entry form (the **“Registered Preferred Shares”**). The entries in the Register shall be conclusive and binding for all purposes absent manifest error. The Company and each Holder of the

Preferred Shares shall treat each Person whose name is recorded in the Register as the owner of a Preferred Share for all purposes (including, without limitation, the right to receive payments and Dividends hereunder) notwithstanding notice to the contrary. A Registered Preferred Share may be assigned, transferred or sold only by registration of such assignment or sale on the Register. Upon its receipt of a written request to assign, transfer or sell one or more Registered Preferred Shares by such Holder thereof, the Company shall record the information contained therein in the Register and issue one or more new Registered Preferred Shares in the same aggregate Stated Value as the Stated Value of the surrendered Registered Preferred Shares to the designated assignee or transferee pursuant to Section 20, provided that if the Company does not so record an assignment, transfer or sale (as the case may be) of such Registered Preferred Shares within two (2) Business Days of such a request, then the Register shall be automatically deemed updated to reflect such assignment, transfer or sale (as the case may be). Notwithstanding anything to the contrary set forth in this Section 4, following conversion of any Preferred Shares in accordance with the terms hereof, the applicable Holder shall not be required to physically surrender such Preferred Shares held in the form of a Preferred Share Certificate to the Company unless (A) the full or remaining number of Preferred Shares represented by the applicable Preferred Share Certificate are being converted (in which event such certificate(s) shall be delivered to the Company as contemplated by this Section 4(c)(iii)) or (B) such Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of Preferred Shares upon physical surrender of the applicable Preferred Share Certificate. Each Holder and the Company shall maintain records showing the Stated Value, Dividends and Late Charges converted and/or paid (as the case may be) and the dates of such conversions and/or payments (as the case may be) or shall use such other method, reasonably satisfactory to such Holder and the Company, so as not to require physical surrender of a Preferred Share Certificate upon conversion. If the Company does not update the Register to record such Stated Value, Dividends and Late Charges converted and/or paid (as the case may be) and the dates of such conversions and/or payments (as the case may be) within two (2) Business Days of such occurrence, then the Register shall be automatically deemed updated to reflect such occurrence. In the event of any dispute or discrepancy, such records of such Holder establishing the number of Preferred Shares to which the record holder is entitled shall be controlling and determinative in the absence of manifest error. A Holder and any transferee or assignee, by acceptance of a certificate, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of any Preferred Shares, the number of Preferred Shares represented by such certificate may be less than the number of Preferred Shares stated on the face thereof. Each Preferred Share Certificate shall bear the following legend:

ANY TRANSFEREE OR ASSIGNEE OF THIS CERTIFICATE SHOULD CAREFULLY REVIEW THE TERMS OF THE COMPANY'S CERTIFICATE OF DESIGNATIONS RELATING TO THE SHARES OF SERIES F-1 PREFERRED STOCK REPRESENTED BY THIS CERTIFICATE, INCLUDING SECTION 4(c)(iii) THEREOF. THE NUMBER OF SHARES OF SERIES F-1 PREFERRED STOCK REPRESENTED BY THIS CERTIFICATE MAY BE LESS THAN THE NUMBER OF SHARES OF SERIES F-1 PREFERRED STOCK STATED ON THE FACE HEREOF PURSUANT TO SECTION 4(c)(iii) OF THE CERTIFICATE OF DESIGNATIONS RELATING TO THE SHARES OF SERIES F-1 PREFERRED STOCK REPRESENTED BY THIS CERTIFICATE.

(iv) Pro Rata Conversion; Disputes. In the event that the Company receives a Conversion Notice from more than one Holder for the same Conversion Date and the Company can convert some, but not all, of such Preferred Shares submitted for conversion, the Company shall convert from each Holder electing to have Preferred Shares converted on such date a pro rata amount of such Holder's Preferred Shares submitted for conversion on such date based on the number of Preferred Shares submitted for conversion on such date by such Holder relative to the aggregate number of Preferred Shares submitted for conversion on such date. In the event of a dispute as to the number of shares of Common Stock issuable to a Holder in connection with a conversion of Preferred Shares, the Company shall issue to such Holder the number of shares of Common Stock not in dispute and resolve such dispute in accordance with Section 25.

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(d) Limitation on Beneficial Ownership.

(i) Beneficial Ownership. The Company shall not effect the conversion of any of the Preferred Shares held by a Holder, and such Holder shall not have the right to convert any of the Preferred Shares held by such Holder pursuant to the terms and conditions of this Certificate of Designations and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, such Holder together with the other Attribution Parties collectively would beneficially own in excess of [4.99][9.99]% (the "**Maximum Percentage**") of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by such Holder and the other Attribution Parties shall include the number of shares of Common Stock held by such Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon conversion of the Preferred Shares with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted Preferred Shares beneficially owned by such Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any convertible notes, convertible preferred stock or warrants, including the Preferred Shares and the Warrants) beneficially owned by such Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 4(d)(i). For purposes of this Section 4(d)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the 1934 Act. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder. For purposes of determining the number of outstanding shares of Common Stock a Holder may acquire upon the conversion of such Preferred Shares without exceeding the Maximum Percentage, such Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the "**Reported Outstanding Share Number**"). If the Company receives a Conversion Notice from a Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall notify such Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause such Holder's beneficial ownership, as determined pursuant to this Section 4(d)(i), to exceed the Maximum Percentage, such Holder must notify the Company of a reduced number of shares of Common Stock to be purchased pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of any Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including such Preferred Shares, by such Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to a Holder upon conversion of such Preferred Shares results in such Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which such Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and such Holder shall not have the power to vote or to transfer the Excess Shares. Upon delivery of a written notice to the Company, any Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage of such Holder to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to such Holder and the other Attribution Parties and not to any other Holder that is not an Attribution Party of such Holder. For purposes of clarity, the shares of Common Stock issuable to a Holder pursuant to the terms of this Certificate of Designations in excess of the Maximum Percentage shall not be deemed to be beneficially owned by such Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to convert such Preferred Shares pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of convertibility. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 4(d)(i) to the extent necessary to correct this paragraph (or any portion of this paragraph) which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 4(d)(i) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of such Preferred Shares.

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(ii) Principal Market Regulation. The Company shall not issue any shares of Common Stock upon conversion of any Preferred Shares or otherwise

pursuant to the terms of this Certificate of Designations if the issuance of such shares of Common Stock (taken together with the issuance of all other shares of Common Stock upon exercise of the Warrants) would exceed the aggregate number of shares of Common Stock which the Company may issue upon exercise or conversion (as the case may be) of the Preferred Shares and the Warrants without breaching the Company's obligations under the rules and regulations the listing rules of the Principal Market (the number of shares which may be issued without violating such rules and regulations, the "**Exchange Cap**"), except that such limitation shall not apply in the event that the Company (A) obtains the approval of its stockholders as required by the applicable rules and regulations of the Principal Market for issuances of shares of Common Stock in excess of such amount or (B) obtains a written opinion from outside counsel to the Company that such approval is not required, which opinion shall be reasonably satisfactory to the Required Holders. Until such approval or such written opinion is obtained, no Holder shall be issued in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrant, shares of Common Stock in an amount greater than the product of (i) the Exchange Cap as of the Initial Issuance Date multiplied by (ii) the quotient of (1) the aggregate number of Preferred Shares issued to such Holder on the Initial Issuance Date divided by (2) the aggregate number of Preferred Shares issued to the Holders on the Initial Issuance Date (with respect to each Holder, the "**Exchange Cap Allocation**"). In the event that any Holder shall sell or otherwise transfer any of such Holder's Preferred Shares, the transferee shall be allocated a pro rata portion of such Holder's Exchange Cap Allocation with respect to such portion of such Preferred Shares so transferred, and the restrictions of the prior sentence shall apply to such transferee with respect to the portion of the Exchange Cap Allocation so allocated to such transferee. Upon conversion in full of a holder's Preferred Shares, the difference (if any) between such holder's Exchange Cap Allocation and the number of shares of Common Stock actually issued to such holder upon such holder's conversion in full of such Preferred Shares shall be allocated, to the respective Exchange Cap Allocations of the remaining holders of Preferred Shares and/or related Warrants on a pro rata basis in proportion to the shares of Common Stock underlying the Preferred Shares and/or related Warrants then held by each such holder of Preferred Shares and/or related Warrants. In the event that after December 1, 2024, the Company is prohibited from issuing any shares of Common Stock pursuant to this Section 4(d)(ii)(the "**Exchange Cap Shares**") to a Holder, the Company shall pay cash from funds legally available therefor to such Holder in exchange for the redemption of such number of Preferred Shares held by such Holder that are not convertible into such Exchange Cap Shares at a price equal to the sum of (i) the product of (x) such number of Exchange Cap Shares and (y) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date such Holder delivers the applicable Conversion Notice with respect to such Exchange Cap Shares to the Company and ending on the date of such issuance and payment under this Section 4(d)(ii) and (ii) to the extent such Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by such Holder of Exchange Cap Shares, any brokerage commissions and other out-of-pocket expenses, if any, of such Holder incurred in connection therewith.

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(e) Right of Alternate Conversion.

(i) Alternate Conversion Upon a Triggering Event. Subject to Section 4(d), at any time during a Triggering Event Redemption Right Period (as defined below), such Holder may, at such Holder's option, by delivery of a Conversion Notice to the Company (the date of any such Conversion Notice, each an "**Alternate Conversion Date**"), convert all, or any number of Preferred Shares (such Conversion Amount of the Preferred Shares to be converted pursuant to this Section 4(e)(ii), each, an "**Alternate Conversion Amount**") into shares of Common Stock at the Alternate Conversion Price (each an "**Alternate Conversion**").

(ii) Mechanics of Alternate Conversion. On any Alternate Conversion Date, a Holder may voluntarily convert any Alternate Conversion Amount of Preferred Shares pursuant to Section 4(c) (with "Alternate Conversion Price" replacing "Conversion Price" for all purposes hereunder with respect to such Alternate Conversion and with "Required Premium of the Conversion Amount" replacing "Conversion Amount" in clause (x) of the definition of Conversion Rate above with respect to such Alternate Conversion) by designating in the Conversion Notice delivered pursuant to this Section 4(e) of this Certificate of Designations that such Holder is electing to use the Alternate Conversion Price for such conversion; provided that in the event of the Conversion Floor Price Condition, on the applicable Alternate Conversion Date the Company shall also deliver to the Holder the applicable Alternate Conversion Floor Amount. Notwithstanding anything to the contrary in this Section 4(e), but subject to Section 4(d), until the Company delivers shares of Common Stock representing the applicable Alternate Conversion Amount of Preferred Shares to such Holder, such Preferred Shares may be converted by such Holder into shares of Common Stock pursuant to Section 4(c) without regard to this Section 4(e).

(b) Mandatory Conversion. If at any time from and after the date hereof, (i) the closing price of the Company's Common Stock on the Trading Market equals or exceeds \$5.448 per share (as of the date hereof, which amount may be adjusted for certain capital events, such as stock splits following the Effective Date, as described herein) for 20 consecutive Trading Days (the "**Mandatory Conversion Measuring Period**") and (ii) the daily dollar trading volume for the Company's Common Stock on the Trading Market exceeds \$3,000,000 per Trading Day for the Mandatory Conversion Measuring Period and (iii) the Equity Conditions are satisfied on each Trading Day of the Mandatory Conversion Measuring Period, then the Company shall have the right to require the Holder to mandatorily convert all or any portion of the Preferred Shares, including the Make-Whole Amount, the Additional Amount and any accrued but unpaid Late Charges, as designated in the Mandatory Conversion Notice on the Mandatory Conversion Date (each as defined below) into fully paid, validly issued and nonassessable shares of Common Stock at the Conversion Price as of the Mandatory Conversion Date (as defined below) (a "**Mandatory Conversion**"), provided that the number of Preferred Shares that may be subject to Mandatory Conversion at any given time shall be limited by the provisions of Section 4(d) (i). The Company may exercise its right to require conversion under this Section 4 by delivering within not more than five (5) Trading Days following the end of such Mandatory Conversion Measuring Period a written notice thereof by electronic mail to the Holder (the "**Mandatory Conversion Notice**") and the date that the Holder received such notice is referred to as the "**Mandatory Conversion Notice Date**". The Mandatory Conversion Notice shall be irrevocable. The Mandatory Conversion Notice shall state (I) the Trading Day on which the Mandatory Conversion shall occur, which shall be the second (2nd) Trading Day following the Mandatory Conversion Notice Date (the "**Mandatory Conversion Date**") and (II) the aggregate number of Preferred Shares which the Company has elected to be subject to such Mandatory Conversion from the Holder (the "**Mandatory Conversion Amount**") pursuant to this Section 4. If the Equity Conditions cease to be satisfied during Mandatory Conversion Measuring Period then, at the option of the Holder, the Mandatory Conversion shall be deemed withdrawn and void ab initio. For clarity, the Holder shall be entitled to convert the Preferred Shares at any time and from time to time during the Mandatory Conversion Measuring Period pursuant to Section 4(a).

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5. Triggering Event Redemptions.

(a) Triggering Event. Each of the following events shall constitute a "**Triggering Event**" and each of the events in clauses (viii), (ix), and (x) shall constitute a "**Bankruptcy Triggering Event**":

(i) the suspension from trading or the failure of the Common Stock to be trading or listed (as applicable) on an Eligible Market for a period of five (5) consecutive Trading Days;

(ii) the Company's (A) failure to cure a Conversion Failure or a Delivery Failure (as defined in the Warrants) by delivery of the required number of shares of Common Stock within five (5) Trading Days after the applicable Conversion Date or exercise date (as the case may be) or (B) written notice to any holder of Preferred Shares or Warrants, including, without limitation, by way of public announcement or through any of its agents, at any time, of its intention not to comply, as required, with a request for exercise of any Warrants for Warrant Shares in accordance with the provisions of the Warrants or a request for conversion of any Preferred Shares into shares of Common Stock that is requested in accordance with the provisions of this Certificate of Designations, other than pursuant to Section 4(d) hereof;

(iii) except to the extent the Company is in compliance with Section 11(b) below, following the Stockholder Approval Date (as defined in the Securities Purchase Agreement), at any time following the tenth (10th) consecutive day that a Holder's Authorized Share Allocation (as defined in Section 11(a) below) is less than the sum of (A) 200% of the number of shares of Common Stock that such Holder would be entitled to receive upon a conversion, in full, of all of the Preferred Shares then

held by such Holder (assuming a conversion at the Floor Price then in effect and without regard to any limitations on conversion set forth in this Certificate of Designations) and (B) 200% of the number of shares of Common Stock that such Holder would then be entitled to receive upon exercise in full of such Holder's Warrants (without regard to any limitations on exercise set forth in the Warrants);

(iv) subject to the applicable provisions of Section 170 of the DGCL, the Board fails to declare any Dividend to be paid on the applicable Dividend Date in accordance with Section 3;

(v) the Company's failure to pay to any Holder any Dividend on any Dividend Date (whether or not declared by the Board) or any other amount when and as due under this Certificate of Designations (including, without limitation, the Company's failure to pay any redemption payments or amounts hereunder), the Securities Purchase Agreement or any other Transaction Document or any other agreement, document, certificate or other instrument delivered in connection with the transactions contemplated hereby and thereby (in each case, whether or not permitted pursuant to the DGCL), except, in the case of a failure to pay Dividends and Late Charges when and as due, in each such case only if such failure remains uncured for a period of at least five (5) Trading Days;

(vi) the Company fails to deliver Conversion Shares or Warrant Shares without a restrictive legend on any certificate or any shares of Common Stock issued to the applicable Holder upon conversion or exercise (as the case may be) of any Securities (as defined in the Securities Purchase Agreement) acquired by such Holder under the Transaction Documents as and when required by such Securities or the Securities Purchase Agreement, as applicable, and any such failure remains uncured for at least five (5) Trading Days;

(vii) the occurrence of any default under, redemption of or acceleration prior to maturity of at least an aggregate of \$250,000 of Indebtedness (as defined in the Securities Purchase Agreement) of the Company or any of its Subsidiaries;

(viii) bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for the relief of debtors shall be instituted by or against the Company or any Subsidiary and, if instituted against the Company or any Subsidiary by a third party, shall not be dismissed within thirty (30) days of their initiation;

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(ix) the commencement by the Company or any Subsidiary of a voluntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree, order, judgment or other similar document in respect of the Company or any Subsidiary in an involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal, state or foreign law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the execution of a composition of debts, or the occurrence of any other similar federal, state or foreign proceeding, or the admission by it in writing of its inability to pay its debts generally as they become due, the taking of corporate action by the Company or any Subsidiary in furtherance of any such action or the taking of any action by any Person to commence a Uniform Commercial Code foreclosure sale or any other similar action under federal, state or foreign law;

(x) the entry by a court of (i) a decree, order, judgment or other similar document in respect of the Company or any Subsidiary of a voluntary or involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or (ii) a decree, order, judgment or other similar document adjudging the Company or any Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking liquidation, reorganization, arrangement, adjustment or composition of or in respect of the Company or any Subsidiary under any applicable federal, state or foreign law or (iii) a decree, order, judgment or other similar document appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree, order, judgment or other similar document or any such other decree, order, judgment or other similar document unstayed and in effect for a period of thirty (30) consecutive days;

(xi) a final judgment or judgments for the payment of money aggregating in excess of \$250,000 are rendered against the Company and/or any of its Subsidiaries and which judgments are not, within thirty (30) days after the entry thereof, bonded, discharged, settled or stayed pending appeal, or are not discharged within thirty (30) days after the expiration of such stay; provided, however, any judgment which is covered by insurance or an indemnity from a credit worthy party shall not be included in calculating the \$250,000 amount set forth above so long as the Company provides each Holder a written statement from such insurer or indemnity provider (which written statement shall be reasonably satisfactory to each Holder) to the effect that such judgment is covered by insurance or an indemnity and the Company or such Subsidiary (as the case may be) will receive the proceeds of such insurance or indemnity within thirty (30) days of the issuance of such judgment;

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(xii) the Company and/or any Subsidiary, individually or in the aggregate, either (i) fails to pay, when due, or within any applicable grace period, any payment with respect to any Indebtedness in excess of \$250,000 due to any third party (other than, with respect to unsecured Indebtedness only, payments contested by the Company and/or such Subsidiary (as the case may be) in good faith by proper proceedings and with respect to which adequate reserves have been set aside for the payment thereof in accordance with GAAP) or is otherwise in breach or violation of any agreement for monies owed or owing in an amount in excess of \$250,000, which breach or violation permits the other party thereto to declare a default or otherwise accelerate amounts due thereunder, or (ii) suffer to exist any other circumstance or event that would, with or without the passage of time or the giving of notice, result in a default or event of default under any agreement binding the Company or any Subsidiary, which default or event of default would or is likely to have a material adverse effect on the business, assets, operations (including results thereof), liabilities, properties, condition (including financial condition) or prospects of the Company or any of its Subsidiaries, individually or in the aggregate, but only if such failure or occurrence remains uncured for a period of at least five (5) days;

(xiii) other than as specifically set forth in another clause of this Section 5(a), the Company or any Subsidiary breaches any representation or warranty in any material respect (other than representations or warranties subject to material adverse effect or materiality, which may not be breached in any respect) or any covenant or other term or condition of any Transaction Document, except, in the case of a breach of a covenant or other term or condition that is curable, only if such breach remains uncured for a period of five (5) consecutive Trading Days;

(xiv) a false or inaccurate certification (including a false or inaccurate deemed certification) by the Company that either (A) the Equity Conditions are satisfied, (B) there has been no Equity Conditions Failure, or (C) as to whether any Triggering Event has occurred;

(xv) any breach or failure in any respect by the Company or any Subsidiary to comply with any provision of Section 15(m) of this Certificate of Designations;

(xvi) any Material Adverse Effect (as defined in the Securities Purchase Agreement) occurs that has not been cured, if capable of curing, within ten (10) Trading Days of the occurrence thereof; or

(xvii) any provision of any Transaction Document shall at any time for any reason (other than pursuant to the express terms thereof) cease to be valid and binding on or enforceable against the Company, or the validity or enforceability thereof shall be contested, directly or indirectly, by the Company or any Subsidiary, or a proceeding shall be commenced by the Company or any Subsidiary or any governmental authority having jurisdiction over any of them, seeking to establish the invalidity or

(b) **Notice of a Triggering Event; Redemption Right.** Upon the occurrence of a Triggering Event with respect to the Preferred Shares, the Company shall within one (1) Business Day deliver written notice thereof via electronic mail and overnight courier (with next day delivery specified) (an “**Triggering Event Notice**”) to each Holder. At any time after the earlier of a Holder’s receipt of a Triggering Event Notice and such Holder becoming aware of a Triggering Event (such earlier date, the “**Triggering Event Right Commencement Date**”) and ending (such ending date, the “**Triggering Event Right Expiration Date**”, and each such period, a “**Triggering Event Redemption Right Period**”) on the fifteenth (15th) Trading Day after the later of (x) the later of (1) the date such Triggering Event is cured and (2) the date the Company delivers written notice to the Holders of the cure of such Triggering Event and (y) such Holder’s receipt of a Triggering Event Notice that includes (I) a reasonable description of the applicable Triggering Event, (II) a certification as to whether, in the opinion of the Company, such Triggering Event is capable of being cured and, if applicable, a reasonable description of any existing plans of the Company to cure such Triggering Event and (III) a certification as to the date the Triggering Event occurred and, if cured on or prior to the date of such Triggering Event Notice, the applicable Triggering Event Right Expiration Date, such Holder may require the Company to redeem (regardless of whether such Triggering Event has been cured on or prior to the Triggering Event Right Expiration Date) all or any of the Preferred Shares by delivering written notice thereof (the “**Triggering Event Redemption Notice**”) to the Company, which Triggering Event Redemption Notice shall indicate the number of the Preferred Shares such Holder is electing to redeem. Each of the Preferred Shares subject to redemption by the Company pursuant to this Section 5(b) shall be redeemed by the Company at a price equal to the greater of (i) the product of (A) the Conversion Amount to be redeemed multiplied by (B) the Redemption Premium and (ii) the product of (X) the Conversion Rate with respect to the Conversion Amount in effect at such time as such Holder delivers a Triggering Event Redemption Notice multiplied by (Y) the product of (1) the Redemption Premium multiplied by (2) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date immediately preceding such Triggering Event and ending on the date the Company makes the entire payment required to be made under this Section 5(b) (the “**Triggering Event Redemption Price**”). Redemptions required by this Section 5(b) shall be made in accordance with the provisions of Section 12. To the extent redemptions required by this Section 5(b) are deemed or determined by a court of competent jurisdiction to be prepayments of the Preferred Shares by the Company, such redemptions shall be deemed to be voluntary prepayments. Notwithstanding anything to the contrary in this Section 5(b), but subject to Section 4(d), until the Triggering Event Redemption Price (together with any Late Charges thereon) is paid in full, the Conversion Amount submitted for redemption under this Section 5(b) (together with any Late Charges thereon) may be converted, in whole or in part, by such Holder into Common Stock pursuant to the terms of this Certificate of Designations. In the event of a partial redemption of the Preferred Shares held by a Holder pursuant hereto, the number of Preferred Shares of such Holder redeemed shall be deducted from the Installment Amount(s) of such Holder relating to the applicable Installment Date(s) as set forth in the Triggering Event Redemption Notice including Section 4(e). In the event of the Company’s redemption of any of the Preferred Shares under this Section 5(b), a Holder’s damages would be uncertain and difficult to estimate because of the parties’ inability to predict future interest rates and the uncertainty of the availability of a suitable substitute investment opportunity for such Holder. Accordingly, any redemption premium due under this Section 5(b) is intended by the parties to be, and shall be deemed, a reasonable estimate of such Holder’s actual loss of its investment opportunity and not as a penalty. Any redemption upon a Triggering Event shall not constitute an election of remedies by the applicable Holder or any other Holder, and all other rights and remedies of each Holder shall be preserved.

(c) **Mandatory Redemption upon Bankruptcy Triggering Event.** Notwithstanding anything to the contrary herein, and notwithstanding any conversion that is then required or in process, upon any Bankruptcy Triggering Event, whether occurring prior to or following the Maturity Date, the Company shall immediately redeem, out of funds legally available therefor, each of the Preferred Shares then outstanding at a redemption price equal to the applicable Triggering Event Redemption Price (calculated as if such Holder shall have delivered the Triggering Event Redemption Notice immediately prior to the occurrence of such Bankruptcy Triggering Event), without the requirement for any notice or demand or other action by any Holder or any other person or entity, provided that a Holder may, in its sole discretion, waive such right to receive payment upon a Bankruptcy Triggering Event, in whole or in part, and any such waiver shall not affect any other rights of such Holder or any other Holder hereunder, including any other rights in respect of such Bankruptcy Triggering Event, any right to conversion, and any right to payment of such Triggering Event Redemption Price or any other Redemption Price, as applicable.

6. Rights Upon Fundamental Transactions.

(a) **Assumption.** The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity (if the Successor Entity is not the Company) assumes in writing all of the obligations of the Company under this Certificate of Designations and the other Transaction Documents in accordance with the provisions of this Section 6(a) pursuant to written agreements in form and substance satisfactory to the Required Holders and approved by the Required Holders prior to such Fundamental Transaction, including agreements to deliver to each holder of Preferred Shares in exchange for such Preferred Shares a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Certificate of Designations, including, without limitation, having a stated value and dividend rate equal to the stated value and dividend rate of the Preferred Shares held by the Holders and having similar ranking to the Preferred Shares, and satisfactory to the Required Holders and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose shares of common stock are quoted on or listed for trading on an Eligible Market. Upon the occurrence of any Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designations and the other Transaction Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Certificate of Designations and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein and therein. In addition to the foregoing, upon consummation of a Fundamental Transaction, the Successor Entity (if the Successor Entity is not the Company) shall deliver to each Holder confirmation that there shall be issued upon conversion or redemption of the Preferred Shares at any time after the consummation of such Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 7 and 17, which shall continue to be receivable thereafter)) issuable upon the conversion or redemption of the Preferred Shares prior to such Fundamental Transaction, such shares of the publicly traded common stock (or their equivalent) of the Successor Entity (including its Parent Entity) which each Holder would have been entitled to receive upon the happening of such Fundamental Transaction had all the Preferred Shares held by each Holder been converted immediately prior to such Fundamental Transaction (without regard to any limitations on the conversion of the Preferred Shares contained in this Certificate of Designations), as adjusted in accordance with the provisions of this Certificate of Designations. Notwithstanding the foregoing, such Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 6(a) to permit the Fundamental Transaction without the assumption of the Preferred Shares. The provisions of this Section 6 shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion or redemption of the Preferred Shares.

(b) **Notice of a Change of Control Redemption Right.** No sooner than twenty (20) Trading Days nor later than ten (10) Trading Days prior to the consummation of a Change of Control (the “**Change of Control Date**”), but not prior to the public announcement of such Change of Control, the Company shall deliver written notice thereof via electronic mail and overnight courier to each Holder (a “**Change of Control Notice**”). At any time during the period beginning after a Holder’s receipt of a Change of Control Notice or such Holder becoming aware of a Change of Control if a Change of Control Notice is not delivered to such Holder in accordance with the immediately preceding sentence (as applicable) and ending on the later of (A) the date of consummation of such Change of Control or (B) twenty (20) Trading Days after the date of receipt of such Change of Control Notice or (C) twenty (20) Trading Days after the date of the announcement of such Change of Control, such Holder may require the Company to redeem all or any portion of such Holder’s Preferred Shares by delivering written notice thereof (“**Change of Control Redemption Notice**”) to the Company, which Change of Control Redemption Notice shall indicate the number of Preferred Shares such Holder is electing to have the Company redeem. Each Preferred Share subject to redemption pursuant to this Section 6(b) shall be redeemed by the Company in funds legally available therefor at a price equal to the greatest of (i) the product of (w) the Change of Control Redemption Premium multiplied by (y) the Conversion Amount of the Preferred Shares being redeemed, (ii) the product of (x) the Change of Control

Redemption Premium multiplied by (y) the product of (A) the Conversion Amount of the Preferred Shares being redeemed multiplied by (B) the quotient determined by dividing (I) the greatest Closing Sale Price of the shares of Common Stock during the period beginning on the date immediately preceding the earlier to occur of (1) the consummation of the applicable Change of Control and (2) the public announcement of such Change of Control and ending on the date such Holder delivers the Change of Control Redemption Notice by (II) the Conversion Price then in effect and (iii) the product of (y) the Change of Control Redemption Premium multiplied by (z) the product of (A) the Conversion Amount of the Preferred Shares being redeemed multiplied by (B) the quotient of (I) the aggregate cash consideration and the aggregate cash value of any non-cash consideration per share of Common Stock to be paid to such holders of the shares of Common Stock upon consummation of such Change of Control (any such non-cash consideration constituting publicly-traded securities shall be valued at the highest of the Closing Sale Price of such securities as of the Trading Day immediately prior to the consummation of such Change of Control, the Closing Sale Price of such securities on the Trading Day immediately following the public announcement of such proposed Change of Control and the Closing Sale Price of such securities on the Trading Day immediately prior to the public announcement of such proposed Change of Control) divided by (II) the Conversion Price then in effect (the “**Change of Control Redemption Price**”). Redemptions required by this Section 6(b) shall have priority to payments to all other stockholders of the Company in connection with such Change of Control. To the extent redemptions required by this Section 6(b) are deemed or determined by a court of competent jurisdiction to be prepayments of the Preferred Shares by the Company, such redemptions shall be deemed to be voluntary prepayments. Notwithstanding anything to the contrary in this Section 6(b), but subject to Section 4(d), until the applicable Change of Control Redemption Price (together with any Late Charges thereon) is paid in full to the applicable Holder, the Preferred Shares submitted by such Holder for redemption under this Section 6(b) may be converted, in whole or in part, by such Holder into Common Stock pursuant to Section 4 or in the event the Conversion Date is after the consummation of such Change of Control, stock or equity interests of the Successor Entity substantially equivalent to the Company’s shares of Common Stock pursuant to Section 4. In the event of a partial redemption of the Preferred Shares held by a Holder pursuant hereto, the number of Preferred Shares of such Holder redeemed shall be deducted from the Installment Amount(s) of such Holder relating to the applicable Installment Date(s) as set forth in the Change of Control Redemption Notice. In the event of the Company’s redemption of any of the Preferred Shares under this Section 6(b), such Holder’s damages would be uncertain and difficult to estimate because of the parties’ inability to predict future interest rates and the uncertainty of the availability of a suitable substitute investment opportunity for a Holder. Accordingly, any redemption premium due under this Section 6(b) is intended by the parties to be, and shall be deemed, a reasonable estimate of such Holder’s actual loss of its investment opportunity and not as a penalty. The Company shall make payment of the applicable Change of Control Redemption Price concurrently with the consummation of such Change of Control if a Change of Control Redemption Notice is received prior to the consummation of such Change of Control and within two (2) Trading Days after the Company’s receipt of such notice otherwise (the “**Change of Control Redemption Date**”). Redemptions required by this Section 6 shall be made in accordance with the provisions of Section 12.

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7. Rights Upon Issuance of Purchase Rights and Other Corporate Events.

(a) Purchase Rights. In addition to any adjustments pursuant to Section 8 below, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to all or substantially all of the record holders of any class of Common Stock (the “**Purchase Rights**”), then each Holder 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 all the Preferred Shares (without taking into account any limitations or restrictions on the convertibility of the Preferred Shares and assuming for such purpose that all the Preferred Shares were converted at the Alternate Conversion Price as of the applicable record date) held by such Holder immediately prior to the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that such Holder’s right to participate in any such Purchase Right would result in such Holder and the other Attribution Parties exceeding the Maximum Percentage, then such Holder shall not be entitled to participate in such Purchase Right to such extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent of any such excess) and such Purchase Right to such extent shall be held in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable) for the benefit of such Holder until such time or times, if ever, as its right thereto would not result in such Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times such Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable)) to the same extent as if there had been no such limitation).

(b) Other Corporate Events. In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a “**Corporate Event**”), the Company shall make appropriate provision to ensure that each Holder will thereafter have the right, at such Holder’s option, to receive upon a conversion of all the Preferred Shares held by such Holder (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which such Holder would have been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by such Holder upon the consummation of such Corporate Event (without taking into account any limitations or restrictions on the convertibility of the Preferred Shares set forth in this Certificate of Designations) or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of shares of Common Stock in connection with the consummation of such Corporate Event in such amounts as such Holder would have been entitled to receive had the Preferred Shares held by such Holder initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant the preceding sentence shall be in a form and substance satisfactory to the Required Holders. The provisions of this Section 7 shall apply similarly and equally to successive Corporate Events and shall be applied without regard to any limitations on the conversion or redemption of the Preferred Shares set forth in this Certificate of Designations.

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8. Rights Upon Issuance of Other Securities.

(a) Adjustment of Conversion Price upon Issuance of Common Stock. If and whenever on or after the Subscription Date the Company grants, issues or sells (or enters into any agreement or publicly announces its intention to grant, issue or sell), or in accordance with this Section 8(a) is deemed to have granted, issued or sold, any shares of Common Stock (including the granting, issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding any Excluded Securities granted, issued or sold or deemed to have been granted, issued or sold) for a consideration per share (the “**New Issuance Price**”) less than a price equal to the Conversion Price in effect immediately prior to such granting, issuance or sale or deemed granting, issuance or sale (such Conversion Price then in effect is referred to herein as the “**Applicable Price**”) (the foregoing a “**Dilutive Issuance**”), then, immediately after such Dilutive Issuance, the Conversion Price then in effect shall be reduced to an amount equal to the New Issuance Price. For all purposes of the foregoing (including, without limitation, determining the adjusted Conversion Price and the New Issuance Price under this Section 8(a)), the following shall be applicable:

(i) Issuance of Options. If the Company in any manner grants, issues or sells (or enters into any agreement to grant, issue or sell) any Options and the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting, issuance or sale of such Option for such price per share. For purposes of this Section 8(a)(i), the “lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting, issuance or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such Option for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise

of any such Option or otherwise pursuant to the terms thereof, minus (2) the sum of all amounts paid or payable to the holder of such Option (or any other Person) with respect to any one share of Common Stock upon the granting, issuance or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Option (or any other Person). Except as contemplated below, no further adjustment of the Conversion Price shall be made upon the actual issuance of such share of Common Stock or of such Convertible Securities upon the exercise of such Options or otherwise pursuant to the terms thereof or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

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(ii) Issuance of Convertible Securities. If the Company in any manner issues or sells (or enters into any agreement to issue or sell) any Convertible Securities and the lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale (or the time of execution of such agreement to issue or sell, as applicable) of such Convertible Securities for such price per share. For the purposes of this Section 8(a)(ii), the “lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to one share of Common Stock upon the issuance or sale (or pursuant to the agreement to issue or sell, as applicable) of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security or otherwise pursuant to the terms thereof and (y) the lowest conversion price set forth in such Convertible Security for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Convertible Security (or any other Person) with respect to any one share of Common Stock upon the issuance or sale (or the agreement to issue or sell, as applicable) of such Convertible Security plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Convertible Security (or any other Person). Except as contemplated below, no further adjustment of the Conversion Price shall be made upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities or otherwise pursuant to the terms thereof, and if any such issuance or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of the Conversion Price has been or is to be made pursuant to other provisions of this Section 8(a), except as contemplated below, no further adjustment of the Conversion Price shall be made by reason of such issuance or sale.

(iii) Change in Option Price or Rate of Conversion. If the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares of Common Stock increases or decreases at any time (other than proportional changes in conversion or exercise prices, as applicable, in connection with an event referred to in Section 8(b) below), the Conversion Price in effect at the time of such increase or decrease shall be adjusted to the Conversion Price which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate (as the case may be) at the time initially granted, issued or sold. For purposes of this Section 8(a)(iii), if the terms of any Option or Convertible Security (including, without limitation, any Option or Convertible Security that was outstanding as of the Subscription Date) are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 8(a) shall be made if such adjustment would result in an increase of the Conversion Price then in effect.

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(iv) Calculation of Consideration Received. If any Option and/or Convertible Security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company (as determined by the Required Holders, the “**Primary Security**”, and such Option and/or Convertible Security and/or Adjustment Right, the “**Secondary Securities**” and together with the Primary Security, each a “**Unit**”), together comprising one integrated transaction, the aggregate consideration per share of Common Stock with respect to such Primary Security shall be deemed to be the lower of (x) the purchase price of such Unit, (y) if such Primary Security is an Option and/or Convertible Security, the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise or conversion of the Primary Security in accordance with Section 8(a)(i) or 8(a)(ii) above and (z) the lowest VWAP of the shares of Common Stock on any Trading Day during the five (5) Trading Day period (the “**Adjustment Period**”) immediately following the public announcement of such Dilutive Issuance (for the avoidance of doubt, if such public announcement is released prior to the opening of the Principal Market on a Trading Day, such Trading Day shall be the first Trading Day in such five (5) Trading Day period and if any Preferred Shares are converted, on any given Conversion Date during any such Adjustment Period, solely with respect to such Preferred Shares converted on such applicable Conversion Date, such applicable Adjustment Period shall be deemed to have ended on, and included, the Trading Day immediately prior to such Conversion Date). If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount of consideration received by the Company therefor. If any shares of Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company for such securities will be the arithmetic average of the VWAPs of such security for each of the five (5) Trading Days immediately preceding the date of receipt. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities (as the case may be). The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Required Holders. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five (5) Trading Days after the tenth (10th) day following such Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Required Holders. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) Record Date. If the Company takes a record of the holders of shares of Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase shares of Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issuance or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase (as the case may be).

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(b) Adjustment of Conversion Price upon Subdivision or Combination of Common Stock. Without limiting any provision of Sections 7, 17 or 8(a), if the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. Without limiting any provision of Sections 7, 17 or 8(a), if the Company at any time on or after the Subscription Date combines (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased. Any adjustment pursuant to this Section 8(b) shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this Section 8(b) occurs during the period that a Conversion Price is calculated hereunder, then the calculation of such Conversion Price shall be adjusted appropriately to reflect such event.

(c) Holder’s Right of Adjusted Conversion Price. In addition to and not in limitation of the other provisions of this Section 8(b), if the Company in any manner

issues or sells or enters into any agreement to issue or sell, any Common Stock, Options or Convertible Securities (any such securities, “**Variable Price Securities**”) after the Subscription Date that are issuable pursuant to such agreement or convertible into or exchangeable or exercisable for shares of Common Stock at a price which varies or may vary with the market price of the shares of Common Stock, including by way of one or more reset(s) to a fixed price, but exclusive of such formulations reflecting customary anti-dilution provisions (such as share splits, share combinations, share dividends and similar transactions) (each of the formulations for such variable price being herein referred to as, the “**Variable Price**”), the Company shall provide written notice thereof via electronic mail and overnight courier to each Holder on the date of such agreement and/or the issuance of such shares of Common Stock, Convertible Securities or Options, as applicable. From and after the date the Company enters into such agreement or issues any such Variable Price Securities, each Holder shall have the right, but not the obligation, in its sole discretion to substitute the Variable Price for the Conversion Price upon conversion of the Preferred Shares by designating in the Conversion Notice delivered upon any conversion of Preferred Shares that solely for purposes of such conversion such Holder is relying on the Variable Price rather than the Conversion Price then in effect. A Holder’s election to rely on a Variable Price for a particular conversion of Preferred Shares shall not obligate such Holder to rely on a Variable Price for any future conversions of Preferred Shares. In addition, from and after the date the Company enters into such agreement or issues any such Variable Price Securities, for purposes of calculating the Installment Conversion Price as of any time of determination, the “Conversion Price” as used therein shall mean the lower of (x) the Conversion Price as of such time of determination and (y) the Variable Price as of such time of determination.

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(d) Stock Combination Event Adjustments. If at any time and from time to time on or after the Subscription Date there occurs any stock split, stock dividend, stock combination, reverse stock split, recapitalization or other similar transaction involving the Common Stock (each, a “**Stock Combination Event**”, and such date thereof, the “**Stock Combination Event Date**”) and the Event Market Price is less than the Conversion Price then in effect (after giving effect to the adjustment in Section 8(b) above), then on or prior to the sixteenth (16th) Trading Day immediately following such Stock Combination Event Date (“**Stock Combination Event Adjustment Date**”), the Conversion Price then in effect on such Stock Combination Event Adjustment Date (after giving effect to the adjustment in Section 8(b) above) shall be reduced (but in no event increased) to the Event Market Price. For the avoidance of doubt, if the adjustment in the immediately preceding sentence would otherwise result in an increase in the Conversion Price hereunder, no adjustment shall be made.

(e) Other Events. In the event that the Company (or any Subsidiary) shall take any action to which the provisions hereof are not strictly applicable, or, if applicable, would not operate to protect any Holder from dilution or if any event occurs of the type contemplated by the provisions of this Section 8 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Board shall in good faith determine and implement an appropriate adjustment in the Conversion Price so as to protect the rights of such Holder, provided that no such adjustment pursuant to this Section 8(e) will increase the Conversion Price as otherwise determined pursuant to this Section 8, provided further that if such Holder does not accept such adjustments as appropriately protecting its interests hereunder against such dilution, then the Board and such Holder shall agree, in good faith, upon an independent investment bank of nationally recognized standing to make such appropriate adjustments, whose determination shall be final and binding absent manifest error and whose fees and expenses shall be borne by the Company.

(f) Calculations. All calculations under this Section 8 shall be made by rounding to the nearest cent or the nearest 1/100th of a share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issue or sale of Common Stock.

(g) Voluntary Adjustment by Company. Subject to the rules and regulations of the Principal Market, the Company may at any time any Preferred Shares remain outstanding, with the prior written consent of the Required Holders, reduce the then current Conversion Price to any amount and for any period of time deemed appropriate by the Board.

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9. Installment Conversion or Installment Redemption

(a) General. On each applicable Installment Date, provided no Equity Conditions Failure has occurred and is continuing, the Company shall pay to each Holder of Preferred Shares the applicable Installment Amount due on such date by converting such Installment Amount in accordance with this Section 9 (an “**Installment Conversion**”); provided, however, that the Company may, at its option following notice to each Holder as set forth below, pay the Installment Amount by redeeming such Installment Amount in legally available funds at the Cash Installment Price (an “**Installment Redemption**”) or by any combination of an Installment Conversion and an Installment Redemption so long as all of the outstanding applicable Installment Amount due on any Installment Date shall be converted and/or redeemed by the Company on the applicable Installment Date, subject to the provisions of this Section 9. On a date which is between the twenty-fifth (25th) Trading Day and the twenty-third (23rd) Trading Day prior to each Installment Date (each, an “**Installment Notice Due Date**”), the Company shall deliver written notice (each, an “**Installment Notice**” and the date all Holders receive such notice is referred to as to the “**Installment Notice Date**”), to each Holder of Preferred Shares and such Installment Notice shall (i) either (A) confirm that the applicable Installment Amount of such Holder shall be converted in whole pursuant to an Installment Conversion or (B) (1) state that the Company elects to redeem for cash, or is required to redeem for cash in accordance with the provisions of this Certificate of Designations, in whole or in part, the applicable Installment Amount pursuant to an Installment Redemption and (2) specify the portion of such Installment Amount which the Company elects or is required to redeem pursuant to an Installment Redemption (such amount to be redeemed in cash, the “**Installment Redemption Amount**” and for clarity, the Installment Redemption Amount includes the Additional Amount and the Make-Whole Amount on the Preferred Shares being converted pursuant to such Installment Redemption Amount) and the portion of the applicable Installment Amount, if any, with respect to which the Company will, and is permitted to, effect an Installment Conversion (such amount of the applicable Installment Amount so specified to be so converted pursuant to this Section 9 is referred to herein as the “**Installment Conversion Amount**” and for clarity, the Installment Conversion Amount includes the Additional Amount and the Make-Whole Amount on the Preferred Shares being converted pursuant to such Installment Conversion Amount), which amounts when added together, must at least equal the entire applicable Installment Amount and (ii) if the applicable Installment Amount is to be paid, in whole or in part, pursuant to an Installment Conversion, certify that there is not then an Equity Conditions Failure as of the applicable Installment Notice Date. In addition, the Company may not effect an Installment Conversion as to any such Installment Date unless, no later than two Trading Days following the applicable Installment Notice Due Date, the Company shall have, subject to Sections 4(d) and (e), delivered to the Holder’s account with DTC a number of shares of Common Stock to be applied against such Installment Conversion Amount equal to the quotient of (x) the applicable Installment Conversion Amount divided by (y) the Pre-Installment Price (the “**Pre-Installment Conversion Shares**”). In the event that that number of Pre-Installment Conversion Shares that the Company can issue to the Holder is limited as result of Section 4(d), then such excess number of shares shall be held in abeyance until the Holder notifies the Company that the issuances of such shares to the Holder would not violate Section 4(d) at which time the Company shall deliver such shares to the Holder. Each Installment Notice shall be irrevocable. If the Company does not timely deliver an Installment Notice and Pre-Installment Conversion Shares in accordance with this Section 9 with respect to a particular Installment Date, then the Company shall be deemed to have delivered an irrevocable Installment Notice confirming an Installment Redemption of the entire Installment Amount payable on such Installment Date. Except as expressly provided in this Section 9(a), the Company shall convert and/or redeem the applicable Installment Amounts pursuant to this Section 9 in the same ratio of the applicable Installment Amount being converted and/or redeemed hereunder. The applicable Installment Conversion Amount (whether set forth in the applicable Installment Notice or by operation of this Section 9) shall be converted in accordance with Section 9(b) and the applicable Installment Redemption Amount shall be redeemed in accordance with Section 9(c). For purposes hereof, “**Pre-Installment Price**” means, with respect to a particular date of determination, lowest of (i) the Conversion Price then in effect, and (ii) the greater of (x) the Floor Price and (y) 80% of the average of the three lowest closing prices of the Common Stock on Trading Days during the prior thirty (30) consecutive Trading Day period (each, an “**Installment Conversion Price Measuring Period**”) ending and including the Trading Day immediately prior to the applicable Installment Notice Due Date. All such determinations to be appropriately adjusted for any stock split, stock dividend, stock combination or other similar transaction during any such measuring period.

(b) Mechanics of Installment Conversion. Subject to Section 4(d), if the Company delivers an Installment Notice or is deemed to have delivered an Installment Notice certifying that such Installment Amount is being paid, in whole or in part, in an Installment Conversion in accordance with Section 9(a), then the remainder of this Section 9(b) shall apply. The applicable Installment Conversion Amount, if any, shall be converted on the applicable Installment Date at the applicable Installment Conversion Price and the Company shall, on such Installment Date, (A) deliver to each Holder's account with DTC any True-Up Shares and (B) in the event of the Conversion Floor Price Condition, the Company shall deliver to the Holder the applicable Conversion Installment Floor Amount, provided that the Equity Conditions are then satisfied (or waived in writing by such Holder) on such Installment Date and an Installment Conversion is not otherwise prohibited under any other provision of the Certificate of Designations. For purposes hereof, "**True-Up Shares**" means, in the event that the number of shares of Common Stock calculated by taking the applicable Installment Conversion Amount divided by the Installment Conversion Price (the "**Adjustment Shares**"), is greater than the number of Pre-Installment Conversion Shares received with respect to the Installment Date, a number of additional Conversion Shares equal to the difference between (A) such number of Adjustment Shares and (B) such number of Pre-Installment Conversion Shares. If the Company confirmed (or is deemed to have confirmed by operation of Section 9(a)) the conversion of the applicable Installment Conversion Amount, in whole or in part, and there was no Equity Conditions Failure as of the applicable Installment Notice Date (or is deemed to have certified that the Equity Conditions in connection with any such conversion have been satisfied by operation of Section 9(a)) but an Equity Conditions Failure occurred between the applicable Installment Notice Date and any time through the applicable Installment Date (the "**Interim Installment Period**"), the Company shall provide each Holder a subsequent notice to that effect. If there is an Equity Conditions Failure (which is not waived in writing by such Holder) during such Interim Installment Period or an Installment Conversion is not otherwise permitted under any other provision of this Certificate of Designations, then, at the option of such Holder designated in writing to the Company, such Holder may require the Company to do any one or more of the following: (i) the Company shall redeem all or any part designated by such Holder of the unconverted Installment Conversion Amount (such designated amount is referred to as the "**Designated Redemption Amount**") and the Company shall pay to such Holder within three (3) days of such Installment Date, by wire transfer of immediately available funds, an amount in legally available funds equal to 125% of such Designated Redemption Amount, provided, however, at the option of the Holder, (1) the Designated Redemption Amount shall be reduced by an amount equal to the product of the (x) the number of Pre-Installment Conversion Shares issued to the Holder in connection with such Installment Conversion Amount and (y) and the actual prices at which the Holder sold such Pre-Installment Conversion Shares during the Interim Installment Period or (2) such Pre-Installment Conversion Shares shall be retained by the Holder and applied to the next instance in which the Company issues Pre-Installment Conversion Shares; provided, further however, that if the Company does not elect to pay a future Installment Amount by means of an Installment Conversion in accordance with this Section 9, the Holder shall return the number of Pre-Installment Conversion Shares to the Company and/or (ii) the Installment Conversion shall be null and void with respect to all or any part designated by such Holder of the unconverted Installment Conversion Amount and such Holder shall be entitled to all the rights of a holder of the Preferred Shares with respect to such designated part of the Installment Conversion Amount; provided, however, the Conversion Price for such designated part of such unconverted Installment Conversion Amount shall thereafter be adjusted to equal the lesser of (A) the Installment Conversion Price as in effect on the date on which such Holder voided the Installment Conversion and (B) the Installment Conversion Price that would be in effect on the date on which such Holder delivers a Conversion Notice relating thereto as if such date was an Installment Date; provided, further, however, at the option of the Holder, (3) any Pre-Installment Conversion Shares delivered in connection with such voided Installment Conversion shall be deemed to redeem a number of Preferred Shares having a Stated Value equal to the product of (i) the number of such Pre-Installment Conversion Shares and (y) the actual prices at which the Holder sold such Pre-Installment Conversion Shares during the Interim Installment Period or (4) such Pre-Installment Conversion Shares shall be retained by the Holder and applied to the next instance in which the Company issues Pre-Installment Conversion Shares; provided, further however, that if the Company does not elect to pay a future Installment Amount by means of an Installment Conversion in accordance with this Section 9, the Holder shall return the number of Pre-Installment Conversion Shares to the Company. If the Company fails to redeem any Designated Redemption Amount by the second (2nd) day following the applicable Installment Date by payment of such amount by such date for any reason (including, without limitation, to the extent such payment is prohibited pursuant to the DGCL), then such Holder shall have the rights set forth in Section 12(a) as if the Company failed to pay the applicable Installment Redemption Price (as defined below) and all other rights under this Certificate of Designations (including, without limitation, such failure constituting a Triggering Event described in Section 5(a)(iv)). Notwithstanding anything to the contrary in this Section 9(b), but subject to Section 4(d), until the Company delivers Common Stock representing the Installment Conversion Amount to such Holder, the Installment Conversion Amount may be converted by such Holder into Common Stock pursuant to Section 4. In the event that a Holder elects to convert the Installment Conversion Amount prior to the applicable Installment Date as set forth in the immediately preceding sentence, the Installment Conversion Amount so converted shall be deducted from the Installment Amount(s) of such Holder relating to the applicable Installment Date(s) as set forth in the applicable Conversion Notice. For further clarification, if any conversion is applied against an Installment Amount, the Pre-Installment Conversion Shares issued in connection with such Installment Amount (and that were not already applied to such conversions) shall be applied first against such conversions or, at the option of the Holder as indicated in the Conversion Notice, retained by the Holder and applied to the next instance in which the Company issues Pre-Installment Conversion Shares. The Company shall pay any and all taxes that may be payable with respect to the issuance and delivery of any shares of Common Stock in any Installment Conversion hereunder.

(c) Mechanics of Installment Redemption. If the Company elects or is required to effect an Installment Redemption, in whole or in part, in accordance with Section 9(a), then the Installment Redemption Amount, if any, shall be redeemed by the Company in legally available funds on the applicable Installment Date by wire transfer to each Holder of immediately available funds in an amount equal to 105% of the applicable Installment Redemption Amount (the "**Installment Redemption Price**"). If the Company fails to redeem such Installment Redemption Amount on such Installment Date by payment of the Installment Redemption Price for any reason (including, without limitation, to the extent such payment is prohibited pursuant to the DGCL), then, at the option of such Holder designated in writing to the Company (any such designation shall be a "**Conversion Notice**" for purposes of this Certificate of Designations), such Holder may require the Company to convert all or any part of the Installment Redemption Amount at the Installment Conversion Price (determined as of the date of such designation as if such date were an Installment Date) and, in the event of the Conversion Floor Price Condition, the Company shall deliver to the Holder the applicable Conversion Installment Floor Amount. Conversions required by this Section 9(c) shall be made in accordance with the provisions of Section 4(c). Notwithstanding anything to the contrary in this Section 9(c), but subject to Section 4(d), until the Installment Redemption Price (together with any Late Charges thereon) is paid in full, the Installment Redemption Amount (together with any Late Charges thereon) may be converted, in whole or in part, by a Holder into Common Stock pursuant to Section 4. In the event a Holder elects to convert all or any portion of the Installment Redemption Amount prior to the applicable Installment Date as set forth in the immediately preceding sentence, the Installment Redemption Amount so converted shall be deducted from the Installment Amounts relating to the applicable Installment Date(s) as set forth in the applicable Conversion Notice. Redemptions required by this Section 9(c) shall be made in accordance with the provisions of Section 12.

(d) Deferred Installment Amount. Notwithstanding any provision of this Section 9(d) to the contrary, each Holder may, at its option and in its sole discretion, deliver a written notice to the Company no later than the Trading Day immediately prior to the applicable Installment Date electing to have the payment of all or any portion of an Installment Amount of such Holder payable on such Installment Date deferred (such amount deferred, the "**Deferral Amount**"), and such deferral, each a "**Deferral**") until any subsequent Installment Date selected by such Holder, in its sole discretion, in which case, the Deferral Amount shall be added to, and become part of, such subsequent Installment Amount. Any notice delivered by such Holder pursuant to this Section 9(d) shall set forth (i) the Deferral Amount and (ii) the date that such Deferral Amount shall now be payable.

(e) Acceleration of Installment Amounts. Notwithstanding any provision of this Section 9 to the contrary, but subject to Section 4(d), with respect to any given Installment Date (the "**Current Installment Date**"), during the period commencing on the Installment Notice Due Date immediately prior to such Current Installment Date and ending on the Trading Day immediately prior to the next Installment Date (each, an "**Installment Period**"), each Holder may elect, at its option and in its sole discretion, at one or more times in such Installment Period, to convert other Preferred Shares (each, an "**Acceleration**"), and

such aggregate number of Preferred Shares in an Acceleration, each, an “**Acceleration Amount**”), in whole or in part, at the Installment Conversion Price of such Current Installment Date in accordance with the conversion procedures set forth in Section 4 hereunder, *mutatis mutandis*; provided, that if a Conversion Floor Price Condition exists with respect to such Acceleration Date, with each Acceleration the Company shall also deliver to the Holder the Acceleration Floor Amount on the applicable Share Delivery Deadline. Notwithstanding the foregoing, with respect to any given Installment Period, the applicable Holder may not elect to effect any Acceleration during such Installment Period if, in the aggregate, the aggregate number of Preferred Shares subject to Acceleration in such Installment Period exceeds 600% of the Installment Amount for such Current Installment Date. For clarity, any Acceleration Amount shall be applied to the Installment Redemptions in inverse order from the Maturity Date unless otherwise indicated by the Holder.

10. Reserved.

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11. Authorized Shares.

(a) Reservation. So long as any Preferred Shares remain outstanding, following the Stockholder Approval Date (as defined in the Securities Purchase Agreement), the Company shall at all times reserve at least 200% of the aggregate number of shares of Common Stock as shall from time to time be necessary to effect the conversion, including without limitation, Installment Conversions, Alternate Conversion and Accelerations, of all of the Preferred Shares then outstanding at the Floor Price then in effect (without regard to any limitations on conversions and assuming the Preferred Shares remain outstanding until the Maturity Date) (the “**Required Reserve Amount**”). The Required Reserve Amount (including, without limitation, each increase in the number of shares so reserved) shall be allocated pro rata among the Holders based on the number of the Preferred Shares held by each Holder on the Initial Issuance Date or increase in the number of reserved shares, as the case may be (the “**Authorized Share Allocation**”). In the event that a Holder shall sell or otherwise transfer any of such Holder’s Preferred Shares, each transferee shall be allocated a pro rata portion of such Holder’s Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any Preferred Shares shall be allocated to the remaining Holders of Preferred Shares, pro rata based on the number of the Preferred Shares then held by the Holders.

(b) Insufficient Authorized Shares. If, notwithstanding Section 11(a) and not in limitation thereof, at any time while any of the Preferred Shares remain outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon conversion of the Preferred Shares at least a number of shares of Common Stock equal to the Required Reserve Amount (an “**Authorized Share Failure**”), then the Company shall immediately take all action necessary to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for the Preferred Shares then outstanding (or deemed outstanding pursuant to Section 11(a) above). Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders’ approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal (or, if a majority of the voting power then in effect of the capital stock of the Company consents to such increase, in lieu of such proxy statement, deliver to the stockholders of the Company an information statement that has been filed with (and either approved by or not subject to comments from) the SEC with respect thereto). In the event that the Company is prohibited from issuing shares of Common Stock to a Holder upon any conversion due to the failure by the Company to have sufficient shares of Common Stock available out of the authorized but unissued shares of Common Stock (such unavailable number of shares of Common Stock, the “**Authorized Failure Shares**”), in lieu of delivering such Authorized Failure Shares to such Holder, the Company shall pay legally available funds in exchange for the redemption of such portion of the Conversion Amount of the Preferred Shares convertible into such Authorized Failure Shares at a price equal to the sum of (i) the product of (x) such number of Authorized Failure Shares and (y) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date such Holder delivers the applicable Conversion Notice with respect to such Authorized Failure Shares to the Company and ending on the date of such issuance and payment under this Section 11(a); and (ii) to the extent such Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by such Holder of Authorized Failure Shares, any brokerage commissions and other out-of-pocket expenses, if any, of such Holder incurred in connection therewith. Nothing contained in Section 11(a) or this Section 11(b) shall limit any obligations of the Company under any provision of the Securities Purchase Agreement.

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12. Redemptions.

(a) General. If a Holder has submitted a Triggering Event Redemption Notice in accordance with Section 5(b), the Company shall deliver the applicable Triggering Event Redemption Price to such Holder in legally available funds within five (5) Business Days after the Company’s receipt of such Holder’s Triggering Event Redemption Notice. If a Holder has submitted a Change of Control Redemption Notice in accordance with Section 6(b), the Company shall deliver the applicable Change of Control Redemption Price to such Holder in legally available funds concurrently with the consummation of such Change of Control if such notice is received prior to the consummation of such Change of Control and within five (5) Business Days after the Company’s receipt of such notice otherwise. The Company shall deliver the applicable Installment Redemption Price to each Holder in legally available funds on the applicable Installment Date. If a Holder has submitted a Maturity Redemption Notice in accordance with Section 13 below, the Company shall deliver the applicable Maturity Redemption Price to such Holder in legally available funds on the applicable Maturity Redemption Date. Notwithstanding anything herein to the contrary, in connection with any redemption hereunder at a time a Holder is entitled to receive a cash payment under any of the other Transaction Documents, at the option of such Holder delivered in writing to the Company, the applicable Redemption Price hereunder shall be increased by the amount of such cash payment owed to such Holder under such other Transaction Document and, upon payment in full or conversion in accordance herewith, shall satisfy the Company’s payment obligation under such other Transaction Document. In the event of a redemption of less than all of the Preferred Shares, the Company shall promptly cause to be issued and delivered to such Holder a new Preferred Share Certificate (in accordance with Section 20) (or evidence of the creation of a new Book-Entry) representing the number of Preferred Shares which have not been redeemed. In the event that the Company does not pay the applicable Redemption Price to a Holder within the time period required for any reason (including, without limitation, to the extent such payment is prohibited pursuant to the DGCL), at any time thereafter and until the Company pays such unpaid Redemption Price in full, such Holder shall have the option, in lieu of redemption, to require the Company to promptly return to such Holder all or any of the Preferred Shares that were submitted for redemption and for which the applicable Redemption Price (together with any Late Charges thereon) has not been paid. Upon the Company’s receipt of such notice, (x) the applicable Redemption Notice shall be null and void with respect to such Preferred Shares, (y) the Company shall immediately return the applicable Preferred Share Certificate, or issue a new Preferred Share Certificate (in accordance with Section 20(d)), to such Holder (unless the Preferred Shares are held in Book-Entry form, in which case the Company shall deliver evidence to such Holder that a Book-Entry for such Preferred Shares then exists), and in each case the Additional Amount of such Preferred Shares shall be increased by an amount equal to the difference between (1) the applicable Redemption Price (as the case may be, and as adjusted pursuant to this Section 12, if applicable) minus (2) the Stated Value portion of the Conversion Amount submitted for redemption and the Conversion Price of such Preferred Shares shall be automatically adjusted with respect to each conversion effected thereafter by such Holder to the lowest of (A) the Conversion Price as in effect on the date on which the applicable Redemption Notice is voided, (B) the greater of (x) the Floor Price and (y) 75% of the lowest Closing Bid Price of the Common Stock during the period beginning on and including the date on which the applicable Redemption Notice is delivered to the Company and ending on and including the date on which the applicable Redemption Notice is voided and (C) the greater of (x) the Floor Price and (y) 75% of the quotient of (I) the sum of the five (5) lowest VWAPs of the Common Stock during the twenty (20) consecutive Trading Day period ending and including the Trading Day immediately preceding the applicable Conversion Date divided by (II) five (5) (it being understood and agreed that all such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period). A Holder’s delivery of a notice voiding a Redemption Notice and exercise of its rights following such notice shall not affect the Company’s obligations to make any payments of Late Charges which have accrued prior to the date of such notice with respect to the Preferred Shares subject to such notice.

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(b) Redemption by Multiple Holders. Upon the Company's receipt of a Redemption Notice from any Holder for redemption or repayment as a result of an event or occurrence substantially similar to the events or occurrences described in Section 5(b) or Section 6(b), the Company shall immediately, but no later than one (1) Business Day of its receipt thereof, forward to each other Holder by electronic mail a copy of such notice. If the Company receives one or more Redemption Notices, during the seven (7) Business Day period beginning on and including the date which is two (2) Business Days prior to the Company's receipt of the initial Redemption Notice and ending on and including the date which is two (2) Business Days after the Company's receipt of the initial Redemption Notice and the Company is unable to redeem all of the Conversion Amount of such Preferred Shares designated in such initial Redemption Notice and such other Redemption Notices received during such seven (7) Business Day period, then the Company shall redeem a pro rata amount from each Holder based on the Stated Value of the Preferred Shares submitted for redemption pursuant to such Redemption Notices received by the Company during such seven (7) Business Day period.

(c) Reserved.

13. Voting Rights.

(a) Except as otherwise provided herein or as required by applicable law and subject to the provisions of Section 4(d) hereof, Holders of Preferred Shares shall be entitled to vote with holders of the Common Stock on all matters that such holders of Common Stock are entitled to vote upon, in the same manner and with the same effect as the holders of Common Stock, voting together with the holders of Common Stock as a single class. Subject to the provisions of Section 4(d) hereof, each Preferred Share shall entitle the Holder thereof to cast that number of votes per Preferred Share equal to the Stated Value of such Preferred Share divided by the Nasdaq Minimum Price (as defined in Nasdaq Listing Rule 5635(d)) immediately preceding the Subscription Date (or \$2.253 per share, as of the date of this Certificate of Designations, and subject to adjustments for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions following the date hereof). For purposes of clarity, this Nasdaq Minimum Price shall apply only for purposes of this Section 13 of the Certificate of Designations and not apply to any other section of the Certificate of Designations or any Transaction Document. Notwithstanding the foregoing, to the extent that under the DGCL the vote of the holders of the Preferred Shares, voting separately as a class or series, as applicable, is required to authorize a given action of the Company, the affirmative vote or consent of the Required Holders of the shares of the Preferred Shares, voting together in the aggregate and not in separate series unless required under the DGCL, represented at a duly held meeting at which a quorum is present or by written consent of the Required Holders (except as otherwise may be required under the DGCL), voting together in the aggregate and not in separate series unless required under the DGCL, shall constitute the approval of such action by both the class or the series, as applicable. For the avoidance of doubt, for purposes of determining the presence of a quorum at any meeting of the stockholders of the Company at which the Preferred Shares are entitled to vote, the number of Preferred Shares and votes represented by such shares shall be counted on an as converted to Common Stock basis, subject to any limitations on conversion set forth herein. Holders of the Preferred Shares shall be entitled to written notice of all stockholder meetings or written consents (and copies of proxy materials and other information sent to stockholders) with respect to which they would be entitled to vote, which notice would be provided pursuant to the Bylaws and the DGCL.

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(b) Election of Director. On or before June 30, 2024, the Holders of record of the Preferred Shares, exclusively and as a separate class, shall be entitled to elect one (1) director of the Company one time, provided that such election shall be approved by the Company's Nominating and Governance Committee, which approval shall not be unreasonably withheld. If the Holders of the Preferred Shares fail to elect a director to fill the directorship for which they are entitled to elect a director, voting exclusively and as a separate class, pursuant to the first sentence of this Section 14(b), then the directorship not so filled shall remain vacant until such time as the Holders of the Preferred Shares elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Company other than by the stockholders of the Company that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Shares), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Company. Except as otherwise provided in this Section 14(b), a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Section 14(b).

14. Covenants. For so long as any Preferred Shares are outstanding, without the prior written consent of the Required Holders:

(a) Incurrence of Indebtedness. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, incur or guarantee, assume or suffer to exist any Indebtedness (other than Permitted Indebtedness).

(b) Existence of Liens. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, allow or suffer to exist any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by the Company or any of its Subsidiaries (collectively, "Liens") other than Permitted Liens.

(c) Restricted Payments and Investments. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, redeem, defease, repurchase, repay or make any payments in respect of, by the payment of cash or cash equivalents (in whole or in part, whether by way of open market purchases, tender offers, private transactions or otherwise), all or any portion of any Indebtedness (other pursuant to this Certificate of Designations) whether by way of payment in respect of principal of (or premium, if any) or interest on, such Indebtedness or make any Investment, as applicable, if at the time such payment with respect to such Indebtedness and/or Investment, as applicable, is due or is otherwise made or, after giving effect to such payment, (i) an event constituting a Triggering Event has occurred and is continuing or (ii) an event that with the passage of time and without being cured would constitute a Triggering Event has occurred and is continuing.

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(d) Restriction on Redemption and Cash Dividends. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, redeem, repurchase or declare or pay any cash dividend or distribution on any of its capital stock (other than as required by this Certificate of Designations, the Certificate of Designations for the Series G Preferred Stock and the Amended and Restated Certificate of Designations for the Series F Preferred Stock).

(e) Restriction on Transfer of Assets. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, sell, lease, license, assign, transfer, spin-off, split-off, close, convey or otherwise dispose of any assets or rights of the Company or any Subsidiary owned or hereafter acquired whether in a single transaction or a series of related transactions, other than (i) sales, leases, licenses, assignments, transfers, conveyances and other dispositions of such assets or rights by the Company and its Subsidiaries in the ordinary course of business consistent with its past practice, or (ii) sales of inventory and product in the ordinary course of business.

(f) Maturity of Indebtedness. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, permit any Indebtedness of the Company or any of its Subsidiaries to mature or accelerate prior to the Maturity Date.

(g) Change in Nature of Business. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, engage in any material line of business substantially different from those lines of business conducted by or publicly contemplated to be conducted by the Company and/or its Subsidiaries on the Subscription Date or any business reasonably related or incidental thereto. The Company shall not, and the Company shall cause each of its Subsidiaries to not, directly or indirectly, modify its or their corporate structure or purpose in any material respect.

(h) Preservation of Existence, Etc. The Company 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 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; provided, however, that the Company shall have the right to merge or combine wholly-owned Subsidiaries hereunder, or eliminate or dissolve foreign Subsidiaries, in each case where such restructuring does not have a material impact on the Company's assets or ability to comply with the provisions hereof.

(i) Maintenance of Properties, Etc. The Company shall maintain and preserve, and cause each of its Subsidiaries to maintain and preserve, all of its properties which are necessary or useful in the proper conduct of its business in good working order and condition, ordinary wear and tear excepted, and comply, and cause each of its Subsidiaries to comply, at all times with the provisions of all leases to which it is a party as lessee or under which it occupies property, so as to prevent any loss or forfeiture thereof or thereunder.

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(j) Maintenance of Intellectual Property. The Company will, and will cause each of its Subsidiaries to, take all action necessary or advisable to maintain all of the Intellectual Property Rights of the Company and/or any of its Subsidiaries that are necessary or material to the conduct of its business in full force and effect.

(k) Maintenance of Insurance. The Company shall use reasonable best efforts to maintain, and cause each of its Subsidiaries to maintain, insurance with responsible and reputable insurance companies or associations (including, without limitation, comprehensive general liability, hazard, rent and business interruption insurance) with respect to its properties (including all real properties leased or owned by it) and business, in such amounts and covering such risks as are generally consistent with the coverage held by the Company on the Initial Issuance Date.

(l) Transactions with Affiliates. The Company shall not, nor shall it permit any of its Subsidiaries to, enter into, renew, extend or be a party to, any transaction or series of related transactions (including, without limitation, the purchase, sale, lease, transfer or exchange of property or assets of any kind or the rendering of services of any kind) with any affiliate, except transactions in the ordinary course of business in a manner and to an extent, if applicable, consistent with past practice and necessary or desirable for the prudent operation of its business, for fair consideration and on terms no less favorable to it or its Subsidiaries than would be reasonably expected to be obtained in a comparable arm's length transaction with a Person that is not an affiliate thereof.

(m) Restricted Issuances. The Company shall not, directly or indirectly, without the prior written consent of the Required Holders, (i) issue any Preferred Shares (other than as contemplated by the Securities Purchase Agreement and this Certificate of Designations) or (ii) issue any other securities that would cause a breach or default under this Certificate of Designations or the Warrants.

(n) Stay, Extension and Usury Laws. To the extent that it may lawfully do so, the Company (A) agrees that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law (wherever or whenever enacted or in force) that may affect the covenants or the performance of this Certificate of Designations; and (B) expressly waives all benefits or advantages of any such law and agrees that it will not, by resort to any such law, hinder, delay or impede the execution of any power granted to the Holders by this Certificate of Designations, but will suffer and permit the execution of every such power as though no such law has been enacted.

(o) Taxes. The Company and its Subsidiaries shall pay when due all taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against the Company and its Subsidiaries or their respective assets or upon their ownership, possession, use, operation or disposition thereof or upon their rents, receipts or earnings arising therefrom (except where the failure to pay would not, individually or in the aggregate, have a material effect on the Company or any of its Subsidiaries). The Company and its Subsidiaries shall file on or before the due date therefor all personal property tax returns (except where the failure to file would not, individually or in the aggregate, have a material effect on the Company or any of its Subsidiaries). Notwithstanding the foregoing, the Company and its Subsidiaries may contest, in good faith and by appropriate proceedings, taxes for which they maintain adequate reserves therefor in accordance with GAAP.

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(p) Segregated Account. In the event that the Installment Conversion Price is less than the Floor Price for five (5) consecutive Trading Days (as if each such Trading Day was an Installment Date) ("**Segregated Cash Trigger**"), then the Company shall promptly, but in any event within five (5) Business Days following the Segregated Cash Trigger, deposit an amount in cash equal to one-third (1/3) of the outstanding Stated Value into a segregated deposit account (the "**Segregated Cash**"). The Company covenants and agrees that the Segregated Cash will only be used by the Company solely for the purpose of performing its monetary obligations to the Holders under this Certificate of Designations; provided, however, if there is any reduction in the Floor Price after the occurrence of Segregated Cash Trigger, then the Company may use the Segregated Cash for any purpose, including general corporate purposes, unless a subsequent Segregated Cash Trigger occurs.

(q) Independent Investigation. At the request of any Holder either (x) at any time when a Triggering Event has occurred and is continuing, (y) upon the occurrence of an event that with the passage of time or giving of notice would constitute a Triggering Event or (z) at any time such Holder reasonably believes a Triggering Event may have occurred or be continuing, the Company shall hire an independent, reputable investment bank selected by the Company and approved by such Holder to investigate as to whether any breach of the Certificate of Designations has occurred (the "**Independent Investigator**"). If the Independent Investigator determines that such breach of the Certificate of Designations has occurred, the Independent Investigator shall notify the Company of such breach and the Company shall deliver written notice to each Holder of such breach. In connection with such investigation, the Independent Investigator may, during normal business hours, inspect all contracts, books, records, personnel, offices and other facilities and properties of the Company and its Subsidiaries and, to the extent available to the Company after the Company uses reasonable efforts to obtain them, the records of its legal advisors and accountants (including the accountants' work papers) and any books of account, records, reports and other papers not contractually required of the Company to be confidential or secret, or subject to attorney-client or other evidentiary privilege, and the Independent Investigator may make such copies and inspections thereof as the Independent Investigator may reasonably request. The Company shall furnish the Independent Investigator with such financial and operating data and other information with respect to the business and properties of the Company as the Independent Investigator may reasonably request. The Company shall permit the Independent Investigator to discuss the affairs, finances and accounts of the Company with, and to make proposals and furnish advice with respect thereto to, the Company's officers, directors, key employees and independent public accountants or any of them (and by this provision the Company authorizes said accountants to discuss with such Independent Investigator the finances and affairs of the Company and any Subsidiaries), all at such reasonable times, upon reasonable notice, and as often as may be reasonably requested.

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15. Liquidation, Dissolution, Winding-Up. In the event of a Liquidation Event, the Holders shall be entitled to receive in cash out of the assets of the Company, whether from capital or from earnings available for distribution to its stockholders (the "**Liquidation Funds**"), before any amount shall be paid to the holders of any of shares of Junior Stock, but pari passu with any Parity Stock then outstanding, an amount per Preferred Share equal to the greater of (A) 125% of the Conversion Amount of such Preferred Share on the date of such payment and (B) the amount per share such Holder would receive if such Holder converted such Preferred Share into Common Stock immediately prior to the date of such payment, provided that if the Liquidation Funds are insufficient to pay the full amount due to the Holders and holders of shares of Parity Stock, then each Holder and each holder of Parity Stock shall receive a percentage of the Liquidation Funds equal to the full amount of Liquidation Funds payable to such Holder and such holder of Parity Stock as a liquidation preference, in accordance with their respective certificate of designations (or equivalent), as a percentage of the full amount of Liquidation Funds payable to all holders of Preferred Shares and all holders of shares of Parity Stock. To the extent necessary, the Company shall cause such actions to be taken by each of its Subsidiaries so as to enable, to the maximum extent permitted by law, the proceeds of a Liquidation Event to be distributed to the Holders in accordance with this Section 16. All the preferential amounts to be paid to the Holders under this Section 16 shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any Liquidation Funds of the Company to the holders of shares of Junior Stock in connection with a Liquidation

Event as to which this Section 16 applies.

16. Distribution of Assets. In addition to any adjustments pursuant to Section 7(a) and Section 8, if the Company shall declare or make any dividend or other distributions of its assets (or rights to acquire its assets) to any or all holders of shares of Common Stock, by way of return of capital or otherwise (including without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (the “Distributions”), then each Holder, as holders of Preferred Shares, will be entitled to such Distributions as if such Holder had held the number of shares of Common Stock acquirable upon complete conversion of the Preferred Shares (without taking into account any limitations or restrictions on the convertibility of the Preferred Shares and assuming for such purpose that the Preferred Share was converted at the Alternate Conversion Price as of the applicable record date) immediately prior to the date on which a record is taken for such Distribution or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for such Distributions (provided, however, that to the extent that such Holder’s right to participate in any such Distribution would result in such Holder and the other Attribution Parties exceeding the Maximum Percentage, then such Holder shall not be entitled to participate in such Distribution to such extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to such extent of any such excess) and the portion of such Distribution shall be held in abeyance for the benefit of such Holder until such time or times as its right thereto would not result in such Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times, if any, such Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

17. Vote to Change the Terms of or Issue Preferred Shares. In addition to any other rights provided by law, except where the vote or written consent of the holders of a greater number of shares is required by law or by another provision of the Certificate of Incorporation, without first obtaining the affirmative vote at a meeting duly called for such purpose or the written consent without a meeting of the Required Holders, voting together as a single class, the Company shall not (in any case, whether by amendment, modification, recapitalization, merger, consolidation or otherwise): (a) amend or repeal any provision of, or add any provision to, its Certificate of Incorporation or bylaws, or file any certificate of designations or articles of amendment of any series of shares of preferred stock, if such action would adversely alter or change in any respect the preferences, rights, privileges or powers, or restrictions provided for the benefit of the Preferred Shares hereunder, regardless of whether any such action shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise; provided that the affirmative vote of the Required Holders is not required for changes to the Series F Preferred Stock; (b) increase or decrease (other than by conversion) the authorized number of Preferred Shares; (c) without limiting any provision of Section 2, create or authorize (by reclassification or otherwise) any new class or series of Senior Preferred Stock or Parity Stock, other than the Series G Preferred Stock; (d) purchase, repurchase or redeem any shares of Junior Stock (other than pursuant to the terms of the Company’s equity incentive plans and options and other equity awards granted under such plans (that have in good faith been approved by the Board)); (e) without limiting any provision of Section 2, pay dividends or make any other distribution on any shares of any Junior Stock; (f) issue any Preferred Shares other than as contemplated hereby or pursuant to the Securities Purchase Agreement; or (g) without limiting any provision of Section 10, whether or not prohibited by the terms of the Preferred Shares, circumvent a right of the Preferred Shares hereunder.

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18. Transfer of Preferred Shares. A Holder may transfer some or all of its Preferred Shares without the consent of the Company, but any such transfer shall be in compliance with all applicable securities laws.

19. Reissuance of Preferred Share Certificates and Book Entries

(a) Transfer. If any Preferred Shares are to be transferred, the applicable Holder shall surrender the applicable Preferred Share Certificate to the Company (or, if the Preferred Shares are held in Book-Entry form, a written instruction letter to the Company), whereupon the Company will forthwith issue and deliver upon the order of such Holder a new Preferred Share Certificate (in accordance with Section 20(d)) (or evidence of the transfer of such Book-Entry), registered as such Holder may request, representing the outstanding number of Preferred Shares being transferred by such Holder and, if less than the entire outstanding number of Preferred Shares is being transferred, a new Preferred Share Certificate (in accordance with Section 20(d)) to such Holder representing the outstanding number of Preferred Shares not being transferred (or evidence of such remaining Preferred Shares in a Book-Entry for such Holder). Such Holder and any assignee, by acceptance of the Preferred Share Certificate or evidence of Book-Entry issuance, as applicable, acknowledge and agree that, by reason of the provisions of Section 4(c)(i) following conversion or redemption of any of the Preferred Shares, the outstanding number of Preferred Shares represented by the Preferred Shares may be less than the number of Preferred Shares stated on the face of the Preferred Shares.

(b) Lost, Stolen or Mutilated Preferred Share Certificate. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of a Preferred Share Certificate (as to which a written certification and the indemnification contemplated below shall suffice as such evidence), and, in the case of loss, theft or destruction, of any indemnification undertaking by the applicable Holder to the Company in customary and reasonable form and, in the case of mutilation, upon surrender and cancellation of such Preferred Share Certificate, the Company shall execute and deliver to such Holder a new Preferred Share Certificate (in accordance with Section 20(d)) representing the applicable outstanding number of Preferred Shares.

(c) Preferred Share Certificate and Book-Entries Exchangeable for Different Denominations and Forms Each Preferred Share Certificate is exchangeable, upon the surrender hereof by the applicable Holder at the principal office of the Company, for a new Preferred Share Certificate or Preferred Share Certificate(s) or new Book-Entry (in accordance with Section 20(d)) representing, in the aggregate, the outstanding number of the Preferred Shares in the original Preferred Share Certificate, and each such new Preferred Share Certificate and/or new Book-Entry, as applicable, will represent such portion of such outstanding number of Preferred Shares from the original Preferred Share Certificate as is designated in writing by such Holder at the time of such surrender. Each Book-Entry may be exchanged into one or more new Preferred Share Certificates or split by the applicable Holder by delivery of a written notice to the Company into two or more new Book-Entries (in accordance with Section 20(d)) representing, in the aggregate, the outstanding number of the Preferred Shares in the original Book-Entry, and each such new Book-Entry and/or new Preferred Share Certificate, as applicable, will represent such portion of such outstanding number of Preferred Shares from the original Book-Entry as is designated in writing by such Holder at the time of such surrender.

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(d) Issuance of New Preferred Share Certificate or Book-Entry. Whenever the Company is required to issue a new Preferred Share Certificate or a new Book-Entry pursuant to the terms of this Certificate of Designations, such new Preferred Share Certificate or new Book-Entry (i) shall represent, as indicated on the face of such Preferred Share Certificate or in such Book-Entry, as applicable, the number of Preferred Shares remaining outstanding (or in the case of a new Preferred Share Certificate or new Book-Entry being issued pursuant to Section 20(a) or Section 20(c), the number of Preferred Shares designated by such Holder) which, when added to the number of Preferred Shares represented by the other new Preferred Share Certificates or other new Book-Entry, as applicable, issued in connection with such issuance, does not exceed the number of Preferred Shares remaining outstanding under the original Preferred Share Certificate or original Book-Entry, as applicable, immediately prior to such issuance of new Preferred Share Certificate or new Book-Entry, as applicable, and (ii) shall have an issuance date, as indicated on the face of such new Preferred Share Certificate or in such new Book-Entry, as applicable, which is the same as the issuance date of the original Preferred Share Certificate or in such original Book-Entry, as applicable.

20. Remedies, Characterizations, Other Obligations, Breaches and Injunctive Relief. The remedies provided in this Certificate of Designations shall be cumulative and in addition to all other remedies available under this Certificate of Designations and any of the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit any Holder’s right to pursue actual and consequential damages for any failure by the Company to comply with the terms of this Certificate of Designations. No failure on the part of a Holder to exercise, 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 such Holder of any right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. In addition, the exercise of any right or remedy of a Holder at law or equity or under this Certificate of Designations or any of the documents shall not be deemed to be an election of such Holder’s rights or remedies under such documents or at law or equity. The Company covenants to each Holder that there shall be

no characterization concerning this instrument other than as expressly provided herein. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by a Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). No failure on the part of a Holder to exercise, 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 such Holder of any right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. In addition, the exercise of any right or remedy of any Holder at law or equity or under Preferred Shares or any of the documents shall not be deemed to be an election of such Holder's rights or remedies under such documents or at law or equity. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holders and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, each Holder shall be entitled, in addition to all other available remedies, to specific performance and/or temporary, preliminary and permanent injunctive or other equitable relief from any court of competent jurisdiction in any such case without the necessity of proving actual damages and without posting a bond or other security. The Company shall provide all information and documentation to a Holder that is requested by such Holder to enable such Holder to confirm the Company's compliance with the terms and conditions of this Certificate of Designations.

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21. Payment of Collection, Enforcement and Other Costs. If (a) any Preferred Shares are placed in the hands of an attorney for collection or enforcement or is collected or enforced through any legal proceeding or a Holder otherwise takes action to collect amounts due under this Certificate of Designations with respect to the Preferred Shares or to enforce the provisions of this Certificate of Designations or (b) there occurs any bankruptcy, reorganization, receivership of the Company or other proceedings affecting Company creditors' rights and involving a claim under this Certificate of Designations, then the Company shall pay the costs incurred by such Holder for such collection, enforcement or action or in connection with such bankruptcy, reorganization, receivership or other proceeding, including, without limitation, attorneys' fees and disbursements. The Company expressly acknowledges and agrees that no amounts due under this Certificate of Designations with respect to any Preferred Shares shall be affected, or limited, by the fact that the purchase price paid for each Preferred Share was less than the original Stated Value thereof.

22. Construction; Headings. This Certificate of Designations shall be deemed to be jointly drafted by the Company and the Holders and shall not be construed against any such Person as the drafter hereof. The headings of this Certificate of Designations are for convenience of reference and shall not form part of, or affect the interpretation of, this Certificate of Designations. Unless the context clearly indicates otherwise, each pronoun herein shall be deemed to include the masculine, feminine, neuter, singular and plural forms thereof. The terms "including," "includes," "include" and words of like import shall be construed broadly as if followed by the words "without limitation." The terms "herein," "hereunder," "hereof" and words of like import refer to this entire Certificate of Designations instead of just the provision in which they are found. Unless expressly indicated otherwise, all section references are to sections of this Certificate of Designations. Terms used in this Certificate of Designations and not otherwise defined herein, but defined in the other Transaction Documents, shall have the meanings ascribed to such terms on the Initial Issuance Date in such other Transaction Documents unless otherwise consented to in writing by the Required Holders.

23. Failure or Indulgence Not Waiver. No failure or delay on the part of a 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 privilege. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. This Certificate of Designations shall be deemed to be jointly drafted by the Company and all Holders and shall not be construed against any Person as the drafter hereof. Notwithstanding the foregoing, nothing contained in this Section 24 shall permit any waiver of any provision of Section 4(d).

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24. Dispute Resolution.

(a) Submission to Dispute Resolution.

(i) (i) In the case of a dispute relating to a Closing Bid Price, a Closing Sale Price, a Conversion Price, an Installment Conversion Price, an Alternate Conversion Price, a VWAP or a fair market value or the arithmetic calculation of a Conversion Rate, or the applicable Redemption Price (as the case may be) (including, without limitation, a dispute relating to the determination of any of the foregoing), the Company or the applicable Holder (as the case may be) shall submit the dispute to the other party via electronic mail (A) if by the Company, within two (2) Business Days after the occurrence of the circumstances giving rise to such dispute or (B) if by such Holder at any time after such Holder learned of the circumstances giving rise to such dispute. If such Holder and the Company are unable to promptly resolve such dispute relating to such Closing Bid Price, such Closing Sale Price, such Conversion Price, such Installment Conversion Price, such Alternate Conversion Price, such VWAP or such fair market value, or the arithmetic calculation of such Conversion Rate or such applicable Redemption Price (as the case may be), at any time after the second (2nd) Business Day following such initial notice by the Company or such Holder (as the case may be) of such dispute to the Company or such Holder (as the case may be), then such Holder may, at its sole option, select an independent, reputable investment bank to resolve such dispute.

(ii) Such Holder and the Company shall each deliver to such investment bank (A) a copy of the initial dispute submission so delivered in accordance with the first sentence of this Section 25 and (B) written documentation supporting its position with respect to such dispute, in each case, no later than 5:00 p.m. (New York time) by the fifth (5th) Business Day immediately following the date on which such Holder selected such investment bank (the "Dispute Submission Deadline") (the documents referred to in the immediately preceding clauses (A) and (B) are collectively referred to herein as the "Required Dispute Documentation") (it being understood and agreed that if either such Holder or the Company fails to so deliver all of the Required Dispute Documentation by the Dispute Submission Deadline, then the party who fails to so submit all of the Required Dispute Documentation shall no longer be entitled to (and hereby waives its right to) deliver or submit any written documentation or other support to such investment bank with respect to such dispute and such investment bank shall resolve such dispute based solely on the Required Dispute Documentation that was delivered to such investment bank prior to the Dispute Submission Deadline). Unless otherwise agreed to in writing by both the Company and such Holder or otherwise requested by such investment bank, neither the Company nor such Holder shall be entitled to deliver or submit any written documentation or other support to such investment bank in connection with such dispute (other than the Required Dispute Documentation).

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(iii) The Company and such Holder shall cause such investment bank to determine the resolution of such dispute and notify the Company and such Holder of such resolution no later than ten (10) Business Days immediately following the Dispute Submission Deadline. The fees and expenses of such investment bank shall be borne solely by the Company, and such investment bank's resolution of such dispute shall be final and binding upon all parties absent manifest error.

(b) Miscellaneous. The Company expressly acknowledges and agrees that (i) this Section 25 constitutes an agreement to arbitrate between the Company and each Holder (and constitutes an arbitration agreement) under § 7501, et seq. of the New York Civil Practice Law and Rules ("CPLR") and that any Holder is authorized to apply for an order to compel arbitration pursuant to CPLR § 7503(a) in order to compel compliance with this Section 25, (ii) a dispute relating to a Conversion Price includes, without limitation, disputes as to (A) whether an issuance or sale or deemed issuance or sale of Common Stock occurred under Section 8(a), (B) the consideration per share at which an issuance or deemed issuance of Common Stock occurred, (C) whether any issuance or sale or deemed issuance or sale of Common Stock was an issuance or sale or deemed issuance or sale of Excluded Securities, (D) whether an agreement, instrument, security or the like constitutes and Option or Convertible Security and (E) whether a Dilutive Issuance occurred, (iii) the terms of this Certificate of Designations and each other applicable Transaction Document shall serve as the basis for the selected investment bank's resolution of the applicable dispute, such investment bank shall be entitled (and is hereby expressly authorized) to make all findings, determinations and the like that such investment bank determines are required to be made by such investment bank in connection with its resolution of such dispute and in resolving such dispute such

investment bank shall apply such findings, determinations and the like to the terms of this Certificate of Designations and any other applicable Transaction Documents, (iv) the applicable Holder (and only such Holder with respect to disputes solely relating to such Holder), in its sole discretion, shall have the right to submit any dispute described in this Section 25 to any state or federal court sitting in The City of New York, Borough of Manhattan in lieu of utilizing the procedures set forth in this Section 25 and (v) nothing in this Section 25 shall limit such Holder from obtaining any injunctive relief or other equitable remedies (including, without limitation, with respect to any matters described in this Section 25).

25. Notices; Currency; Payments.

(a) Notices. The Company shall provide each Holder of Preferred Shares with prompt written notice of all actions taken pursuant to the terms of this Certificate of Designations, including in reasonable detail a description of such action and the reason therefor. Whenever notice is required to be given under this Certificate of Designations, unless otherwise provided herein, such notice must be in writing and shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide each Holder with prompt written notice of all actions taken pursuant to this Certificate of Designations, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company shall give written notice to each Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any grant, issuances, or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to such Holder.

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(b) Currency. All dollar amounts referred to in this Certificate of Designations are in United States Dollars (“**U.S. Dollars**”), and all amounts owing under this Certificate of Designations shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. “**Exchange Rate**” means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Certificate of Designations, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation (it being understood and agreed that where an amount is calculated with reference to, or over, a period of time, the date of calculation shall be the final date of such period of time).

(c) Payments. Whenever any payment of cash is to be made by the Company to any Person pursuant to this Certificate of Designations, unless otherwise expressly set forth herein, such payment shall be made in lawful money of the United States of America by wire transfer of immediately available funds pursuant to wire transfer instructions that Holder shall provide to the Company in writing from time to time. Whenever any amount expressed to be due by the terms of this Certificate of Designations 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. Any amount due under the Transaction Documents which is not paid when due (except to the extent such amount is simultaneously accruing Dividends at the Default Rate hereunder) shall result in a late charge being incurred and payable by the Company in an amount equal to interest on such amount at the rate of fifteen percent (15%) per annum from the date such amount was due until the same is paid in full (“**Late Charge**”).

26. Waiver of Notice. To the extent permitted by law, the Company hereby irrevocably waives demand, notice, presentment, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Certificate of Designations and the Securities Purchase Agreement.

27. Governing Law. This Certificate of Designations shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Certificate of Designations shall be governed by, the internal laws of the State of Delaware, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Delaware or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Delaware. Except as otherwise required by Section 25 above, the Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein (i) shall be deemed or operate to preclude any Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company’s obligations to such Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of such Holder or (ii) shall limit, or shall be deemed or construed to limit, any provision of Section 25 above. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS CERTIFICATE OF DESIGNATIONS OR ANY TRANSACTION CONTEMPLATED HEREBY.**

28. Judgment Currency.

(a) If for the purpose of obtaining or enforcing judgment against the Company in any court in any jurisdiction it becomes necessary to convert into any other currency (such other currency being hereinafter in this Section 29 referred to as the “**Judgment Currency**”) an amount due in U.S. dollars under this Certificate of Designations, the conversion shall be made at the Exchange Rate prevailing on the Trading Day immediately preceding:

(i) the date actual payment of the amount due, in the case of any proceeding in the courts of New York or in the courts of any other jurisdiction that will give effect to such conversion being made on such date: or

(ii) the date on which the foreign court determines, in the case of any proceeding in the courts of any other jurisdiction (the date as of which such conversion is made pursuant to this Section 29(a)(ii) being hereinafter referred to as the “**Judgment Conversion Date**”).

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(b) If in the case of any proceeding in the court of any jurisdiction referred to in Section 29(a)(ii) above, there is a change in the Exchange Rate prevailing between the Judgment Conversion Date and the date of actual payment of the amount due, the applicable party shall pay such adjusted amount as may be necessary to ensure that the amount paid in the Judgment Currency, when converted at the Exchange Rate prevailing on the date of payment, will produce the amount of U.S. dollars which could have been purchased with the amount of Judgment Currency stipulated in the judgment or judicial order at the Exchange Rate prevailing on the Judgment Conversion Date.

(c) Any amount due from the Company under this provision shall be due as a separate debt and shall not be affected by judgment being obtained for any other amounts due under or in respect of this Certificate of Designations.

29. Severability. If any provision of this Certificate of Designations is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Certificate of Designations so long as this Certificate of Designations as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid

or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

30. Maximum Payments. Without limiting Section 9(d) of the Securities Purchase Agreement, nothing contained herein shall be deemed to establish or require the payment of a rate of interest or other charges in excess of the maximum permitted by applicable law. In the event that the rate of interest required to be paid or other charges hereunder exceed the maximum permitted by such law, any payments in excess of such maximum shall be credited against amounts owed by the Company to the applicable Holder and thus refunded to the Company.

31. Stockholder Matters; Amendment.

(a) Stockholder Matters. Any stockholder action, approval or consent required, desired or otherwise sought by the Company pursuant to the DGCL, the Certificate of Incorporation, this Certificate of Designations or otherwise with respect to the issuance of Preferred Shares may be effected by written consent of the Company's stockholders or at a duly called meeting of the Company's stockholders, all in accordance with the applicable rules and regulations of the DGCL. This provision is intended to comply with the applicable sections of the DGCL permitting stockholder action, approval and consent affected by written consent in lieu of a meeting.

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(b) Amendment. Except for Section 4(d)(i), which may not be amended or waived hereunder, this Certificate of Designations or any provision hereof may be amended by obtaining the affirmative vote at a meeting duly called for such purpose, or written consent without a meeting in accordance with the DGCL, of the Required Holders, voting separately as a single class, and with such other stockholder approval, if any, as may then be required pursuant to the DGCL and the Certificate of Incorporation.

32. Certain Defined Terms. For purposes of this Certificate of Designations, the following terms shall have the following meanings:

(a) **"1934 Act"** means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

(b) **"Acceleration Floor Amount"** means an amount in cash, to be delivered by wire transfer of immediately available funds pursuant to wire instructions delivered to the Company by the Holder in writing, equal to the product obtained by multiplying the higher of (I) the highest price that the Common Stock trades at on the Trading Day immediately preceding the relevant Acceleration Date with respect to such Acceleration and (II) the applicable Acceleration Conversion Price of such Acceleration Date and (B) the difference obtained by subtracting (I) the number of shares of Common Stock delivered (or to be delivered) to the Holder on the applicable Share Delivery Deadline with respect to such Acceleration from (II) the quotient obtain by dividing (x) the applicable Acceleration Amount that the Holder has elected to be the subject of the applicable Acceleration, by (y) the applicable Acceleration Conversion Price of such Acceleration Date without giving effect to clause (x) of such definition or clause (x) of the definition of the Installment Conversion Price, as applicable.

(c) **"Additional Amount"** means, as of the applicable date of determination, with respect to each Preferred Share, all accrued and unpaid Dividends on such Preferred Share.

(d) **"Adjustment Right"** means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale in accordance with Section 8(a) of shares of Common Stock (other than rights of the type described in Section 7(a) hereof) that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

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(e) **"Affiliate" or "Affiliated"** means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(f) **"Alternate Conversion Floor Amount"** means an amount in cash, to be delivered by wire transfer of immediately available funds pursuant to wire instructions delivered to the Company by the Holder in writing, equal to the product obtained by multiplying (A) the higher of (I) the highest price that the Common Stock trades at on the Trading Day immediately preceding the relevant Alternate Conversion Date and (II) the applicable Alternate Conversion Price and (B) the difference obtained by subtracting (I) the number of shares of Common Stock delivered (or to be delivered) to the Holder on the applicable Share Delivery Deadline with respect to such Alternate Conversion from (II) the quotient obtained by dividing (x) the applicable Conversion Amount that the Holder has elected to be the subject of the applicable Alternate Conversion, by (y) the applicable Alternate Conversion Price without giving effect to clause (x) of such definition.

(g) **"Alternate Conversion Price"** means, with respect to any Alternate Conversion that price which shall be the lowest of (i) the applicable Conversion Price as in effect on the applicable Conversion Date of the applicable Alternate Conversion, and (ii) the greater of (x) the Floor Price and (y) 75% of the lowest VWAP of the Common Stock of any Trading Day during the twenty (20) consecutive Trading Day period ending and including the Trading Day immediately preceding the delivery or deemed delivery of the applicable Conversion Notice (such period, the **"Alternate Conversion Measuring Period"**). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction that proportionately decreases or increases the Common Stock during such Alternate Conversion Measuring Period.

(h) **"Approved Stock Plan"** means any employee benefit plan or agreement which has been approved by the Board prior to or subsequent to the Subscription Date pursuant to which shares of Common Stock and standard options to purchase Common Stock may be issued to any employee, officer, consultant or director for services provided to the Company in their capacity as such.

(i) **"Attribution Parties"** means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Initial Issuance Date, directly or indirectly managed or advised by a Holder's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of such Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with such Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with such Holder's and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively such Holder and all other Attribution Parties to the Maximum Percentage.

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(j) **"Bloomberg"** means Bloomberg, L.P.

(k) **"Book-Entry"** means each entry on the Register evidencing one or more Preferred Shares held by a Holder in lieu of a Preferred Share Certificate issuable hereunder.

(l) “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(m) “**Cash Installment Price**” means 105% of the applicable Installment Amount.

(n) “**Change of Control**” means any Fundamental Transaction other than (i) any merger of the Company or any of its, direct or indirect, wholly-owned Subsidiaries with or into any of the foregoing Persons, (ii) any reorganization, recapitalization or reclassification of the Common Stock in which holders of the Company’s voting power immediately prior to such reorganization, recapitalization or reclassification continue after such reorganization, recapitalization or reclassification to hold publicly traded securities and, directly or indirectly, are, in all material respects, the holders of the voting power of the surviving entity (or entities with the authority or voting power to elect the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities) after such reorganization, recapitalization or reclassification, (iii) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company or any of its Subsidiaries or (iv) bona fide arm’s length sales or acquisitions by the Company with one or more third parties as long as holders of the Company’s voting power as of the Issuance Date continue after such sale or acquisition to hold publicly traded securities and, directly or indirectly, are, in all material respects, the holders of at least 51% of the voting power of the surviving entity (or entities with the authority or voting power to elect the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities) after such sale or acquisition.

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(o) “**Change of Control Redemption Premium**” means 150%.

(p) “**Closing Bid Price**” and “**Closing Sale Price**” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price (as the case may be) then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price (as the case may be) of such security on such date shall be the fair market value as mutually determined by the Company and the Required Holder. If the Company and the Required Holders are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 25. All such determinations shall be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during such period.

(q) “**Closing Date**” shall have the meaning set forth in the Securities Purchase Agreement, which date is the date the Company initially issued the Preferred Shares and the Warrants pursuant to the terms of the Securities Purchase Agreement.

(r) “**Common Stock**” means (i) the Company’s shares of common stock, par value \$0.001 per share, and (ii) any capital stock into which such common stock shall have been changed or any share capital resulting from a reclassification of such common stock.

(s) “**Contingent Obligation**” means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any Indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

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(t) “**Conversion Floor Price Condition**” means that the relevant Alternate Conversion Price or Installment Conversion Price, as applicable, is being determined based on clause (x) of such definitions.

(u) “**Conversion Installment Floor Amount**” means an amount in cash, to be delivered by wire transfer of immediately available funds pursuant to wire instructions delivered to the Company by the Holder in writing, equal to the product obtained by multiplying (A) the higher of (I) the highest price that the Common Stock trades at on the Trading Day immediately preceding the relevant Installment Date and (II) the applicable Installment Conversion Price and (B) the difference obtained by subtracting (I) the number of shares of Common Stock delivered (or to be delivered) to the Holder on the applicable Installment Date with respect to such Installment Conversion from (II) the quotient obtain by dividing (x) the applicable Installment Amount subject to such Installment Conversion, by (y) the applicable Installment Conversion Price without giving effect to clause (x) of such definition.

(v) “**Convertible Securities**” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any shares of Common Stock.

(w) “**Dividend Date**” means the first Trading Day of each calendar month.

(x) “**Dividend Rate**” means ten percent (10.0%) per annum, as may be adjusted from time to time in accordance with Section 2.

(y) “**Eligible Market**” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the OTCQX, the OTCQB or the Principal Market.

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(z) “**Equity Conditions**” means, with respect to a given date of determination: (i) on each day during the period beginning thirty Trading Days prior to such applicable date of determination and ending on and including such applicable date of determination all shares of Common Stock issuable upon conversion of the Preferred Shares shall be eligible to be resold by the Holders without restriction or any legend under any applicable federal or state securities laws (in each case, disregarding any limitation on conversion of the Preferred Shares, other issuance of securities with respect to the Preferred Shares); (ii) on each day during the period beginning thirty Trading Days prior to the applicable date of determination and ending on and including the applicable date of determination (the “Equity Conditions Measuring Period”), the Common Stock (including all shares of Common Stock issued or issuable upon conversion of the Preferred Shares and exercise of the Warrants) is listed or designated for quotation (as applicable) on an Eligible Market and shall not have been suspended from trading on an Eligible Market (other than suspensions of not more than two (2) days and occurring prior to the applicable date of determination due to business announcements by the Company) nor shall delisting or suspension by an Eligible Market have been threatened (with a reasonable prospect of delisting occurring after giving effect to all applicable notice, appeal, compliance and hearing periods) or reasonably likely to occur or pending as

evidenced by (A) a writing by such Eligible Market or (B) the Company falling below the minimum listing maintenance requirements of the Eligible Market on which the Common Stock is then listed or designated for quotation, as applicable; (iii) during the Equity Conditions Measuring Period, the Company shall have delivered all shares of Common Stock issuable upon conversion of the Preferred Shares on a timely basis as set forth in Section 4 hereof and all other shares of capital stock required to be delivered by the Company on a timely basis as set forth in the other Transaction Documents; (iv) any shares of Common Stock to be issued in connection with the event requiring determination (or issuable upon conversion of the Conversion Amount being redeemed in the event requiring this determination) may be issued in full without violating Section 4(d) hereof; (v) any shares of Common Stock to be issued in connection with the event requiring determination (or issuable upon conversion of the Conversion Amount being redeemed in the event requiring this determination (without regards to any limitations on conversion set forth herein)) may be issued in full without violating the rules or regulations of the Eligible Market on which the Common Stock is then listed or designated for quotation (as applicable); (vi) on each day during the Equity Conditions Measuring Period, no public announcement of a pending, proposed or intended Fundamental Transaction shall have occurred which has not been abandoned, terminated or consummated; (vii) none of the Holders shall be in possession of any material, non-public information provided to any of them by the Company, any of its Subsidiaries or any of their respective affiliates, employees, officers, representatives, agents or the like; (viii) on each day during the Equity Conditions Measuring Period, the Company otherwise shall have been in compliance with each, and shall not have breached any representation or warranty in any material respect (other than representations or warranties subject to material adverse effect or materiality, which may not be breached in any respect) or any covenant or other term or condition of any Transaction Document in any material respect, including, without limitation, the Company shall not have failed to timely make any payment pursuant to any Transaction Document; (ix) on each Trading Day during the Equity Conditions Measuring Period, there shall not have occurred any Volume Failure or Price Failure as of such applicable date of determination; (x) on the applicable date of determination (A) no Authorized Share Failure shall exist or be continuing and the applicable Required Minimum Securities Amount of shares of Common Stock are available under the certificate of incorporation of the Company and reserved by the Company to be issued pursuant to this Certificate of Designations and the Warrants and (B) all shares of Common Stock to be issued in connection with the event requiring this determination (or issuable upon conversion of the Conversion Amount being redeemed in the event requiring this determination (without regards to any limitations on conversion set forth herein)) may be issued in full without resulting in an Authorized Share Failure; (xi) on each day during the Equity Conditions Measuring Period, there shall not have occurred and there shall not exist a Triggering Event or an event that with the passage of time or giving of notice would constitute a Triggering Event; (xii) the Installment Conversion Price is not determined by the Conversion Floor Price Condition; or (xiii) the shares of Common Stock issuable pursuant to the event requiring the satisfaction of the Equity Conditions are duly authorized and listed and eligible for trading without restriction on an Eligible Market.

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(aa) **“Equity Conditions Failure”** means that (i) solely with respect to any Installment Conversion, on any day during the applicable Installment Conversion Price Measuring Period or (ii) with respect to any other date of determination, on any day during the thirty Trading Day period ending on, and including, such date of determination, the Equity Conditions have not been satisfied (or waived in writing by the applicable Holder).

(bb) **“Event Market Price”** means, with respect to any Stock Combination Event Date, at the Holder’s Option, (i) the quotient determined by dividing (x) the sum of the VWAP of the Common Stock for each of the five (5) lowest Trading Days during the twenty (20) consecutive Trading Day period ending and including the Trading Day immediately preceding the sixteenth (16th) Trading Day after such Stock Combination Event Date (the **“Measurement Period”**), divided by (y) five (5), or (ii) the price equal to the VWAP on any Trading Day during the Measurement Period.

(cc) **“Excluded Securities”** means (i) shares of Common Stock or standard options to purchase Common Stock issued or issuable to directors, officers, employees or other service providers of the Company for services rendered to the Company in their capacity as such pursuant to an Approved Stock Plan, provided that (A) all such issuances (taking into account the shares of Common Stock issuable upon exercise of such awards) after the Subscription Date pursuant to this clause (i) do not, in the aggregate, exceed more than 10% of the Common Stock issued and outstanding as of the date of such issuance and (B) the exercise price of any such options is not lowered and none of such options are amended to increase the number of shares issuable thereunder; (ii) shares of Common Stock issued or issuable upon the conversion or exercise of Convertible Securities (other than shares of Common Stock issued or issuable pursuant to an Approved Stock Plan that are covered by clause (i) above) issued prior to the Subscription Date, provided that the conversion price of any such Convertible Securities (other than standard options to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (i) above) is not lowered (other than in accordance with the terms thereof in effect as of the Subscription Date) from the conversion price in effect as of the Subscription Date (whether pursuant to the terms of such Convertible Securities or otherwise), none of such Convertible Securities (other than those issued pursuant to an Approved Stock Plan that are covered by clause (i) above) are amended to increase the number of shares issuable thereunder and none of the terms or conditions of any such Convertible Securities (other than those issued pursuant to an Approved Stock Plan that are covered by clause (i) above) are otherwise materially changed in any manner that adversely affects any of the Buyers; (iii) the shares of Common Stock issuable upon conversion of the Preferred Shares or otherwise pursuant to the terms of this Certificate of Designations; (iv) the shares of Common Stock issuable upon exercise of the Warrants; and, (v) securities issued as consideration for the acquisition of another entity by the Company by merger, purchase of substantially all of the assets or other reorganization or bona fide joint venture agreement, provided that such issuance is approved by the majority of the disinterested directors of the Company and provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the Restricted Period (as defined in the Securities Purchase Agreement) and such issuance does not, in the aggregate, exceed more than 5% of the shares of Common Stock issued and outstanding immediately prior to the Subscription Date.

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(dd) **“Floor Price”** means the lower of (x) \$0.4506 (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) and (y) 20% of the “Minimum Price” (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) on the Stockholder Approval Date (as defined in the Purchase Agreement) (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) or, in any case, such lower amount as permitted, from time to time, by the Principal Market.

(ee) **“Fundamental Transaction”** means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, in any transaction or series of related transactions, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the date of this

Certificate of Designations calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

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(ff) “**GAAP**” means United States generally accepted accounting principles, consistently applied.

(gg) “**Group**” means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(hh) “**Holder Pro Rata Amount**” means, with respect to any Holder, a fraction (i) the numerator of which is the number of Preferred Shares issued to such Holder pursuant to the Securities Purchase Agreement on the Initial Issuance Date and (ii) the denominator of which is the number of Preferred Shares issued to all Holders pursuant to the Securities Purchase Agreement on the Initial Issuance Date.

(ii) “**Indebtedness**” means of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services, including, without limitation, “capital leases” in accordance with United States generally accepted accounting principles consistently applied for the periods covered thereby (other than trade payables entered into in the ordinary course of business consistent with past practice), (C) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with United States generally accepted accounting principles, consistently applied for the periods covered thereby, is classified as a capital lease, (G) all indebtedness referred to in clauses (A) through (F) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, deed of trust, lien, pledge, charge, security interest or other encumbrance of any nature whatsoever in or upon any property or assets (including accounts and contract rights) with respect to any asset or property owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (H) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (G) above.

(jj) “**Installment Amount**” means, as of the applicable date of determination, with respect to a particular Holder, (A) a number of Preferred Shares equal to (i) the product of (1) the Installment Schedule Amount multiplied by (2) such Holder’s Pro Rata Amount (rounded to the nearest whole number) or (ii) all Preferred Shares then held by such Holder only if such number of Preferred Shares then held by such Holder is less than the amount determined under the immediately preceding clause (i), (B) any Deferral Amount deferred pursuant to Section 9(d) to such applicable Installment Date and included in such Installment Amount in accordance therewith, and (C) any Acceleration Amount accelerated pursuant to Section 9(e) for such Current Installment Date and included in such Installment Amount in accordance therewith.

(kk) “**Installment Conversion Price**” means, with respect to a particular date of determination, lowest of (i) the Conversion Price then in effect, and (ii) the greater of (x) the Floor Price and (y) 80% of the average of the three lowest closing prices of the Common Stock on Trading Days during the prior thirty (30) consecutive Trading Day period (each, an “Installment Conversion Price Measuring Period”) ending and including the Trading Day immediately prior to the applicable Installment Date. All such determinations to be appropriately adjusted for any stock split, stock dividend, stock combination or other similar transaction during any such measuring period.

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(ll) “**Installment Schedule Amount**” means, 721.429 Preferred Shares.

(mm) “**Installment Date**” means (i) December 1, 2024, (ii) thereafter, the first Trading Day of each calendar month immediately following the previous Installment Date until the Maturity Date, and (iii) the Maturity Date.

(nn) “**Intellectual Property Rights**” means, with respect to the Company and its Subsidiaries, all of their rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, original works of authorship, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and other intellectual property rights and all applications and registrations therefor.

(oo) “**Investment**” means any beneficial ownership (including stock, partnership or limited liability company interests) of or in any Person, or any loan, advance or capital contribution to any Person or the acquisition of all, or substantially all, of the assets of another Person or the purchase of any assets of another Person for greater than the fair market value of such assets.

(pp) “**Liquidation Event**” means, whether in a single transaction or series of transactions, the voluntary or involuntary liquidation, dissolution or winding up of the Company or such Subsidiaries the assets of which constitute all or substantially all of the assets of the business of the Company and its Subsidiaries, taken as a whole.

(qq) “**Make-Whole Amount**” means, as of any given date and as applicable, in connection with any conversion, redemption or other repayment hereunder, an amount equal to the amount of additional Dividends that would accrue under this Certificate of Designations at the Dividend Rate then in effect assuming for calculation purposes that the Stated Value of this Certificate of Designations as of the Closing Date remained outstanding through and including the Maturity Date.

(rr) “**Material Adverse Effect**” means any material adverse effect on the business, properties, assets, liabilities, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its Subsidiaries, if any, individually or taken as a whole, or on the transactions contemplated hereby or on the other Transaction Documents (as defined below), or by the agreements and instruments to be entered into in connection therewith or on the authority or ability of the Company to perform its obligations under the Transaction Documents.

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(ss) “**Maturity Date**” shall mean June 30, 2025; provided, however, the Maturity Date may be extended at the option of a Holder (i) in the event that, and for so long as, a Triggering Event shall have occurred and be continuing or any event shall have occurred and be continuing that with the passage of time and the failure to cure would result in a Triggering Event or (ii) through the date that is twenty (20) Business Days after the consummation of a Fundamental Transaction in the event that a Fundamental Transaction is publicly announced or a Change of Control Notice is delivered prior to the Maturity Date, provided further that if a Holder elects to convert some or all of its Preferred Shares pursuant to Section 4 hereof, and the Conversion Amount would be limited pursuant to Section 4(d) hereunder, the Maturity Date shall automatically be extended until such time as such provision shall not limit the conversion of such Preferred Shares.

(tt) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(uu) **“Parent Entity”** of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(vv) **“Permitted Indebtedness”** means (i) Indebtedness existing on December 31, 2023 and reflected on the Company’s balance sheet included in the Company’s Annual Report on Form 10-K filed with the SEC on April 8, 2024, and (ii) Indebtedness secured by Permitted Liens or unsecured but as described in clauses (iv) and (v) of the definition of Permitted Liens.

(ww) **“Permitted Liens”** means (i) any Lien for taxes not yet due or delinquent or being contested in good faith by appropriate proceedings for which adequate reserves have been established in accordance with GAAP, (ii) any statutory Lien arising in the ordinary course of business by operation of law with respect to a liability that is not yet due or delinquent, (iii) any Lien created by operation of law, such as materialmen’s liens, mechanics’ liens and other similar liens, arising in the ordinary course of business with respect to a liability that is not yet due or delinquent or that are being contested in good faith by appropriate proceedings, (iv) Liens (A) upon or in any equipment acquired or held by the Company or any of its Subsidiaries to secure the purchase price of such equipment or Indebtedness incurred solely for the purpose of financing the acquisition or lease of such equipment, or (B) existing on such equipment at the time of its acquisition, provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such equipment, in either case, with respect to Indebtedness in an aggregate amount not to exceed \$100,000, (v) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clause (iv) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced does not increase, (vi) Liens in favor of customs and revenue authorities arising as a matter of law to secure payments of custom duties in connection with the importation of goods, and (vii) Liens arising from judgments, decrees or attachments in circumstances not constituting a Triggering Event under Section 5(a)(vii).

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(xx) **“Person”** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity or a government or any department or agency thereof.

(yy) **“Price Failure”** means, with respect to a particular date of determination, the VWAP of the Common Stock on any Trading Day during the twenty (20) Trading Day period ending on the Trading Day immediately preceding such date of determination fails to exceed the Floor Price (as adjusted for stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions occurring after the Subscription Date). All such determinations to be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during any such measuring period.

(zz) **“Principal Market”** means the Nasdaq Capital Market.

(aaa) **“Redemption Notices”** means, collectively, the Triggering Events Redemption Notices, the Maturity Redemption Notice, the Installment Notices with respect to any Installment Redemption and the Change of Control Redemption Notices, and each of the foregoing, individually, a **“Redemption Notice.”**

(bbb) **“Redemption Premium”** means 130%.

(ccc) **“Redemption Prices”** means, collectively, any Triggering Event Redemption Price, Change of Control Redemption Price, Maturity Redemption Price and Installment Redemption Price (including in each case any interest, damages and Make-Whole Amount thereon), and each of the foregoing, individually, a **“Redemption Price.”**

(ddd) **“SEC”** means the United States Securities and Exchange Commission or the successor thereto.

(eee) **“Securities Purchase Agreement”** means that certain securities purchase agreement by and among the Company and the initial holders of Preferred Shares, dated as of the Subscription Date, as may be amended from time in accordance with the terms thereof.

(fff) **“Segregated Cash”** has the meaning set forth in Section 15(p).

(ggg) **“Segregated Cash Trigger”** has the meaning set forth in Section 15(p).

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(hhh) **“Stated Value”** shall mean \$1,000 per share, subject to adjustment for stock splits, stock dividends, recapitalizations, reorganizations, reclassifications, combinations, subdivisions or other similar events occurring after the Initial Issuance Date with respect to the Preferred Shares.

(iii) **“Subscription Date”** means May 20, 2024.

(jii) **“Subject Entity”** means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(kkk) **“Subsidiaries”** shall have the meaning as set forth in the Securities Purchase Agreement.

(lll) **“Successor Entity”** means the Person (or, if so elected by the Required Holders, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Required Holders, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(mmm) **“Trading Day”** means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the applicable Holder or (y) with respect to all determinations other than price determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(nnn) **“Transaction Documents”** means the Securities Purchase Agreement, this Certificate of Designations, the Warrants and each of the other agreements and instruments entered into or delivered by the Company or any of the Holders in connection with the transactions contemplated by the Securities Purchase Agreement, all as may be amended from time to time in accordance with the terms thereof.

(ooo) **“Volume Failure”** means, with respect to a particular date of determination, the aggregate daily dollar trading volume (as reported on Bloomberg) of the Common Stock on the Principal Market on any Trading Day during the twenty (20) Trading Day period ending on the Trading Day immediately preceding such date of determination (such period, the **“Volume Failure Measuring Period”**), is less than \$200,000 (as adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions occurring after the Subscription Date).

(ppp) “**VWAP**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded), during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg through its “VAP” function (set to 09:30 start time and 16:00 end time) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Required Holders. If the Company and the Required Holders are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 25. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

(qqq) “**Warrants**” has the meaning ascribed to such term in the Securities Purchase Agreement, and shall include all warrants issued in exchange therefor or replacement thereof.

(rrr) “**Warrant Shares**” means, collectively, the shares of Common Stock issuable upon exercise of the Warrants.

33. **Disclosure.** Upon receipt or delivery by the Company of any notice in accordance with the terms of this Certificate of Designations, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall on or prior to 9:00 am, New York city time on the Business Day immediately following such notice delivery date, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its Subsidiaries, the Company so shall indicate to the Holder explicitly in writing in such notice (or immediately upon receipt of notice from such Holder, as applicable), and in the absence of any such written indication in such notice (or notification from the Company immediately upon receipt of notice from such Holder), such Holder shall be entitled to presume that information contained in the notice does not constitute material, non-public information relating to the Company or any of its Subsidiaries. Nothing contained in this Section 34 shall limit any obligations of the Company, or any rights of any Holder, under Section 4(l) of the Securities Purchase Agreement.

34. **Non-circumvention.** The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation (as defined in the Securities Purchase Agreement), Bylaws (as defined in the Securities Purchase Agreement) 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 Certificate of Designations, and will at all times in good faith carry out all the provisions of this Certificate of Designations and take all action as may be required to protect the rights of the Holders hereunder. Without limiting the generality of the foregoing or any other provision of this Certificate of Designations or the other Transaction Documents, the Company (a) shall not increase the par value of any shares of Common Stock receivable upon the conversion of any Preferred Shares above the Conversion Price then in effect, (b) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable shares of Common Stock upon the conversion of Preferred Shares and (c) shall, so long as any Preferred Shares are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the conversion of the Preferred Shares, the maximum number of shares of Common Stock as shall from time to time be necessary to effect the conversion of the Preferred Shares then outstanding (without regard to any limitations on conversion contained herein). Notwithstanding anything herein to the contrary, if after the ninety (90) calendar day anniversary of the Initial Issuance Date, each Holder is not permitted to convert such Holder’s Preferred Shares in full for any reason (other than pursuant to restrictions set forth in Section 4(d)(i) hereof), the Company shall use its best efforts to promptly remedy such failure, including, without limitation, obtaining such consents or approvals as necessary to effect such conversion into shares of Common Stock.

35. **Absence of Trading and Disclosure Restrictions.** The Company acknowledges and agrees that no Holder is a fiduciary or agent of the Company and that each Holder shall have no obligation to (a) maintain the confidentiality of any information provided by the Company or (b) refrain from trading any securities while in possession of such information in the absence of a written non-disclosure agreement signed by an officer of such Holder that explicitly provides for such confidentiality and trading restrictions. In the absence of such an executed, written non-disclosure agreement, the Company acknowledges that each Holder may freely trade in any securities issued by the Company, may possess and use any information provided by the Company in connection with such trading activity, and may disclose any such information to any third party.

* * * * *

IN WITNESS WHEREOF, the Company has caused this Certificate of Designations of Series F-1 Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. to be signed by its President on this ____ day of May, 2024.

MyMD PHARMACEUTICALS, INC.

By: _____

Name: _____

Title: _____

Signature Page to Certificate of Designations

**MyMD PHARMACEUTICALS, INC.
CONVERSION NOTICE**

Reference is made to the Certificate of Designations, Preferences and Rights of the Series F-1 Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. (the “**Certificate of Designations**”). In accordance with and pursuant to the Certificate of Designations, the undersigned hereby elects to convert the number of shares of Series F-1 Convertible Preferred Stock, par value \$0.001 per share (the “**Preferred Shares**”), of MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), indicated below into shares of common stock, par value \$0.001 per share (the “**Common Stock**”), of the Company, as of the date specified below.

Date of Conversion: _____

Aggregate number of Preferred Shares to be converted: _____

Aggregate Stated Value of such Preferred Shares to be converted: _____

Aggregate accrued and unpaid Dividends and accrued and unpaid Late Charges with respect to such Preferred Shares and such Aggregate Dividends to be converted: _____

AGGREGATE CONVERSION AMOUNT TO BE CONVERTED: _____

Please confirm the following information:

Conversion Price: _____

Number of shares of Common Stock to be issued: _____

Installment Amount(s) to be reduced (and corresponding Installment Date(s)) and amount of reduction: _____

If this Conversion Notice is being delivered with respect to an Alternate Conversion, check here if Holder is electing to use the following Alternate Conversion Price: _____

EXHIBIT I

If this Conversion Notice is being delivered with respect to an Acceleration, check here if Holder is electing to use the following Installment Conversion Price: _____

Please issue the Common Stock into which the applicable Preferred Shares are being converted to Holder, or for its benefit, as follows:

Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: _____

Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant: _____

DTC Number: _____

Account Number: _____

Date: _____, _____

Name of Registered Holder

By: _____

Name:

Title:

Tax ID: _____

E-mail Address: _____

Exhibit I

EXHIBIT II

ACKNOWLEDGMENT

The Company hereby (a) acknowledges this Conversion Notice, (b) certifies that the above indicated number of shares of Common Stock are eligible to be resold by the Holder without restriction or any legend and (c) hereby directs _____ to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated May ___, 2024 from the Company and acknowledged and agreed to by _____.

MyMD PHARMACEUTICALS, INC.

By: _____

Name:

Title:

Exhibit II

CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF DESIGNATIONS
OF
SERIES F CONVERTIBLE PREFERRED STOCK
OF
MYMD PHARMACEUTICALS, INC.

PURSUANT TO SECTION 242 OF THE
 DELAWARE GENERAL CORPORATION LAW

This Certificate of Amendment to the Amended and Restated Certificate of Designations of Series F Convertible Preferred Stock (the “**Amendment**”) is dated as of May 21, 2024.

WHEREAS, the board of directors (the “**Board**”) of MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), pursuant to the authority granted to it by the Company’s Certificate of Incorporation (the “**Certificate of Incorporation**”) and Section 151(g) of the Delaware General Corporation Law (the “**DGCL**”), has previously fixed the rights, preferences, restrictions and other matters relating to a series of the Company’s preferred stock, consisting of 15,000 authorized shares of preferred stock, classified as Series F Convertible Preferred Stock (the “**Preferred Stock**”), and the Amended and Restated Certificate of Designations of the Preferred Stock (the “**Certificate of Designations**”) was initially filed with the Secretary of State of the State of Delaware on April 8, 2024 evidencing such terms;

WHEREAS, pursuant to Section 32(b) of the Certificate of Designations, the Certificate of Designations or any provision thereof may be amended by obtaining the affirmative vote at a meeting duly called for such purpose, or written consent without a meeting in accordance with the DGCL, of the holders of at least a majority of the outstanding shares of Preferred Stock (the “**Required Holders**”), voting separately as a single class, and with such other stockholder approval, if any, as may then be required pursuant to the DGCL and the Certificate of Incorporation;

WHEREAS, the Required Holders pursuant to the Certificate of Designations have consented, in accordance with the DGCL, on May 20, 2024, to this Amendment on the terms set forth herein; and

WHEREAS, the Board has duly adopted resolutions proposing to adopt this Amendment and declaring this Amendment to be advisable and in the best interest of the Company and its stockholders.

NOW, THEREFORE, this Amendment has been duly adopted in accordance with Section 242 of the DGCL and has been executed by a duly authorized officer of the Company as of the date first set forth above to amend the terms of the Certificate of Designations as follows:

1. Section 9(a) of the Certificate of Designations is hereby amended and restated to read as follows (emphasis added):

(a) General. On each applicable Installment Date, provided no Equity Conditions Failure has occurred and is continuing, the Company shall pay to each Holder of Preferred Shares the applicable Installment Amount due on such date by converting such Installment Amount in accordance with this Section 9 (an “**Installment Conversion**”); provided, however, that the Company may, at its option following notice to each Holder as set forth below, pay the Installment Amount by redeeming such Installment Amount in legally available funds at the Cash Installment Price (an “**Installment Redemption**”) or by any combination of an Installment Conversion and an Installment Redemption so long as all of the outstanding applicable Installment Amount due on any Installment Date shall be converted and/or redeemed by the Company on the applicable Installment Date, subject to the provisions of this Section 9; provided, further, that notwithstanding the foregoing, with respect to any Installment Date falling between (and including) July 1, 2024, and (and including) August 1, 2024, the Company shall pay all or any portion of applicable Installment Amount in the form of an Installment Conversion, provided, that, with respect to any portion of such Installment Amount not paid in the form of an Installment Conversion (the “**Remainder Installment Amount**”), the Company may, at its option, elect to pay all or a portion of such Remainder Installment Amount in the form of Installment Redemption and/or defer the payment of such Installment Redemption to a later date specified by the Company as follows: (x) with respect to any Remainder Installment Amount not paid on July 1, 2024 Installment Date, such Remainder Installment Amount may be deferred to September 1, 2024 and (y) with respect to any Remainder Installment Amount not paid on August 1, 2024 Installment Date, such Remainder Installment Amount may be deferred to October 1, 2024. On a date which is between the twenty-fifth (25th) Trading Day and the twenty-third (23rd) Trading Day prior to each Installment Date (each, an “**Installment Notice Due Date**”), the Company shall deliver written notice (each, an “**Installment Notice**”) and the date all Holders receive such notice is referred to as the “**Installment Notice Date**”), to each Holder of Preferred Shares and such Installment Notice shall (i) either (A) confirm that the applicable Installment Amount of such Holder shall be converted in whole pursuant to an Installment Conversion or (B) (1) state that the Company elects to redeem for cash, or is required to redeem for cash in accordance with the provisions of this Certificate of Designations, in whole or in part, the applicable Installment Amount pursuant to an Installment Redemption and (2) specify the portion of such Installment Amount which the Company elects or is required to redeem pursuant to an Installment Redemption (such amount to be redeemed in cash, the “**Installment Redemption Amount**”) and for clarity, the Installment Redemption Amount includes the Additional Amount and the Make-Whole Amount on the Preferred Shares being converted pursuant to such Installment Redemption Amount) and the portion of the applicable Installment Amount, if any, with respect to which the Company will, and is permitted to, effect an Installment Conversion (such amount of the applicable Installment Amount so specified to be so converted pursuant to this Section 9 is referred to herein as the “**Installment Conversion Amount**”) and for clarity, the Installment Conversion Amount includes the Additional Amount and the Make-Whole Amount on the Preferred Shares being converted pursuant to such Installment Conversion Amount), which amounts when added together, must at least equal the entire applicable Installment Amount and (ii) if the applicable Installment Amount is to be paid, in whole or in part, pursuant to an Installment Conversion, certify that there is not then an Equity Conditions Failure as of the applicable Installment Notice Date. In addition, the Company may not effect an Installment Conversion as to any such Installment Date unless, no later than two Trading Days following the applicable Installment Notice Due Date, the Company shall have, subject to Sections 4(d) and (e), delivered to the Holder’s account with DTC a number of shares of Common Stock to be applied against such Installment Conversion Amount equal to the quotient of (x) the applicable Installment Conversion Amount divided by (y) the Pre-Installment Price (the “**Pre-Installment Conversion Shares**”). In the event that that number of Pre-Installment Conversion Shares that the Company can issue to the Holder is limited as result of Section 4(d), then such excess number of shares shall be held in abeyance until the Holder notifies the Company that the issuances of such shares to the Holder would not violate Section 4(d) at which time the Company shall deliver such shares to the Holder. Each Installment Notice shall be irrevocable. If the Company does not timely deliver an Installment Notice and Pre-Installment Conversion Shares in accordance with this Section 9 with respect to a particular Installment Date, then the Company shall be deemed to have delivered an irrevocable Installment Notice confirming an Installment Redemption of the entire Installment Amount payable on such Installment Date. Except as expressly provided in this Section 9(a), the Company shall convert and/or redeem the applicable Installment Amounts pursuant to this Section 9 in the same ratio of the applicable Installment Amount being converted and/or redeemed hereunder. The applicable Installment Conversion Amount (whether set forth in the applicable Installment Notice or by operation of this Section 9) shall be converted in accordance with Section 9(b) and the applicable Installment Redemption Amount shall be redeemed in accordance with Section 9(c). For purposes hereof, “**Pre-Installment Price**” means, with respect to a particular date of determination, lowest of (i) the Conversion Price then in effect, and (ii) the greater of (x) the Floor Price and (y) 80% of the average of the three lowest closing prices of the Common Stock on Trading Days during the prior thirty (30) consecutive Trading Day period (each, an “**Installment Conversion Price Measuring Period**”) ending and including the Trading Day immediately prior to the applicable Installment Notice Due Date. All such determinations to be appropriately adjusted for any stock split, stock dividend, stock combination or other similar transaction during any such measuring period.

2. Section 33(nn) of the Certificate of Designations is hereby amended and restated to read as follows:

(nn) **“Installment Date”** means (i) July 1, 2023, and thereafter, the first Trading Day of each calendar month immediately following the previous Installment Date until February 1, 2024, (ii) July 1, 2024, and thereafter, the first Trading Day of each calendar month immediately following the previous Installment Date until the Maturity Date, and (iii) the Maturity Date.

3. Section 33(kk) of the Certificate of Designations is hereby amended and restated to read as follows:

(kk) **“Installment Schedule Amount”** means, (i) with respect to the Installment Date falling between (and including) July 1, 2023 and (and including) February 1, 2024, 1,250 Preferred Shares, and (ii) with respect to the Installment Date falling between (and including) July 1, 2024 and (and including) December 31, 2024, 833.3333 Preferred Shares.

4. Section 33(tt) of the Certificate of Designations is hereby amended and restated to read as follows:

(tt) **“Maturity Date”** shall mean December 31, 2024; provided, however, the Maturity Date may be extended at the option of a Holder (i) in the event that, and for so long as, a Triggering Event shall have occurred and be continuing or any event shall have occurred and be continuing that with the passage of time and the failure to cure would result in a Triggering Event or (ii) through the date that is twenty (20) Business Days after the consummation of a Fundamental Transaction in the event that a Fundamental Transaction is publicly announced or a Change of Control Notice is delivered prior to the Maturity Date, provided further that if a Holder elects to convert some or all of its Preferred Shares pursuant to Section 4 hereof, and the Conversion Amount would be limited pursuant to Section 4(d) hereunder, the Maturity Date shall automatically be extended until such time as such provision shall not limit the conversion of such Preferred Shares.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Amendment to be signed by its duly authorized officer this 21st day of May, 2024.

MYMD PHARMACEUTICALS, INC.

By: _____

Name: Christopher Chapman, M.D.

Title: President and Chief Medical Officer

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 TO THE HOLDER (IF REQUESTED BY THE COMPANY), IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD OR ELIGIBLE TO BE 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.

Form of Warrant

MYMD PHARMACEUTICALS, INC.

Warrant To Purchase Common Stock

Date of Issuance: [●], 2024 (“**Issuance Date**”)

MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, _____, the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, upon exercise of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the “**Warrant**”), at any time or times on or after the Issuance Date, but not after 11:59 p.m., New York time, on the Expiration Date (as defined below), _____ (subject to adjustment as provided herein) fully paid and non-assessable shares of Common Stock (as defined below) (the “**Warrant Shares**”, and such number of Warrant Shares, the “**Warrant Number**”). Except as otherwise defined herein, capitalized terms in this Warrant shall have the meanings set forth in Section 19. This Warrant is one of the Warrants to Purchase Common Stock (the “**SPA Warrants**”) issued pursuant to Section 1 of that certain Securities Purchase Agreement, dated as of May 20, 2024 (the “**Subscription Date**”), by and among the Company and the investors (the “**Buyers**”) referred to therein, as amended from time to time (the “**Securities Purchase Agreement**”).

1. Exercise of Warrant.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder on any day on or after the Issuance Date (an “**Exercise Date**”), in whole or in part, by delivery (whether via facsimile or otherwise) of a written notice, in the form attached hereto as **Exhibit A** (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant. Within one (1) Trading Day following an exercise of this Warrant as aforesaid, the Holder shall deliver payment to the Company of an amount equal to the Exercise Price in effect on the date of such exercise multiplied by the number of Warrant Shares as to which this Warrant was so exercised (the “**Aggregate Exercise Price**”) in cash or via wire transfer of immediately available funds if the Holder did not notify the Company in such Exercise Notice that such exercise was made pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original of this Warrant in order to effect an exercise hereunder. Execution and delivery of an Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original of this Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. Execution and delivery of an Exercise Notice for all of the then-remaining Warrant Shares shall have the same effect as cancellation of the original of this Warrant after delivery of the Warrant Shares in accordance with the terms hereof. On or before the first (1st) Trading Day following the date on which the Company has received an Exercise Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation of receipt of such Exercise Notice, in the form attached hereto as **Exhibit B**, to the Holder and the Company’s transfer agent (the “**Transfer Agent**”), which confirmation shall constitute an instruction to the Transfer Agent to process such Exercise Notice in accordance with the terms herein. On or before the first (1st) Trading Day following the date on which the Company has received such Exercise Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade of such Warrant Shares initiated on the applicable Exercise Date), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program (“**FAST**”) and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal at Custodian system, or (Y) if the Transfer Agent is not participating in the DTC FAST, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Exercise Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such exercise. Upon delivery of an Exercise Notice, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the certificates evidencing such Warrant Shares (as the case may be). If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise and upon surrender of this Warrant to the Company by the Holder, then, at the request of the Holder, the Company shall as soon as practicable and in no event later than two (2) Business Days after any exercise and at its own expense, issue and deliver to the Holder (or its designee) a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional shares of Common Stock are to be issued upon the exercise of this Warrant, but rather the number of shares of Common Stock to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Transfer Agent) that may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. Notwithstanding the foregoing, except in the case where an exercise of this Warrant is validly made pursuant to a Cashless Exercise, the Company’s failure to deliver Warrant Shares to the Holder on or prior to the later of (i) two (2) Trading Days after receipt of the applicable Exercise Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade of such Warrant Shares initiated on the applicable Exercise Date) and (ii) one (1) Trading Day after the Company’s receipt of the Aggregate Exercise Price (or valid notice of a Cashless Exercise if permissible) (such later date, the “**Share Delivery Date**”) shall not be deemed to be a breach of this Warrant.

(b) Exercise Price. For purposes of this Warrant, “**Exercise Price**” means \$1.816, subject to adjustment as provided herein.

(c) Company’s Failure to Timely Deliver Securities. If the Company shall fail, for any reason or for no reason, on or prior to the Share Delivery Date, either (I) if the Transfer Agent is not participating in FAST, to issue and deliver to the Holder (or its designee) a certificate for the number of Warrant Shares to which the Holder is entitled and register such Warrant Shares on the Company’s share register or, if the Transfer Agent is participating in FAST and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, to credit the balance account of the Holder or the Holder’s designee with DTC for such number of Warrant Shares to which the Holder is entitled upon the Holder’s exercise of this Warrant (as the case may be) or (II) if a Registration Statement covering the resale of the Warrant Shares that are the subject of the Exercise Notice (the “**Unavailable Warrant Shares**”) is not available for the resale of such Unavailable Warrant Shares and the Company fails to promptly (x) so notify the Holder and (y) deliver the Warrant Shares electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal At Custodian system (the event described in the

immediately foregoing clause (II) is hereinafter referred to as a “**Notice Failure**” and together with the event described in clause (I) above, a “**Delivery Failure**”), then, in addition to all other remedies available to the Holder, (X) the Company shall pay in cash to the Holder on each day after the Share Delivery Date and during such Delivery Failure an amount equal to 2% of the product of (A) the sum of the number of shares of Common Stock not issued to the Holder on or prior to the Share Delivery Date and to which the Holder is entitled, multiplied by (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable Exercise Date and ending on the applicable Share Delivery Date, and (Y) the Holder, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the voiding of an Exercise Notice shall not affect the Company’s obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date either (I) the Transfer Agent is not participating in the DTC FAST, the Company shall fail to issue and deliver to the Holder (or its designee) a certificate and register such shares of Common Stock on the Company’s share register or, if the Transfer Agent is participating in the DTC FAST and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, the Transfer Agent shall fail to credit the balance account of the Holder or the Holder’s designee with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder’s exercise hereunder or pursuant to the Company’s obligation pursuant to clause (ii) below or (II) a Notice Failure occurs, and if on or after such Share Delivery Date the Holder acquires (in an open market transaction, stock loan or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such exercise that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Delivery Failure or Notice Failure, as applicable (a “**Buy-In**”), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after the Holder’s request and in the Holder’s discretion, either (i) pay cash to the Holder in an amount equal to the Holder’s total purchase price (including brokerage commissions, stock loan costs and other out-of-pocket expenses, if any) for the shares of Common Stock so acquired (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the “**Buy-In Price**”), at which point the Company’s obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder’s exercise hereunder (as the case may be) (and to issue such Warrant Shares) shall terminate, or (ii) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such Warrant Shares or credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder’s exercise hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of Warrant Shares multiplied by (B) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Exercise Notice and ending on the date of such issuance and payment under this clause (ii) (the “**Buy-In Payment Amount**”). Nothing shall limit the Holder’s right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of this Warrant as required pursuant to the terms hereof. While this Warrant is outstanding, the Company shall cause its transfer agent to participate in FAST. In addition to the foregoing rights, (i) if the Company fails to deliver the applicable number of Warrant Shares upon an exercise pursuant to Section 1 by the applicable Share Delivery Date, then the Holder shall have the right to rescind such exercise in whole or in part and retain and/or have the Company return, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the rescission of an exercise shall not affect the Company’s obligation to make any payments that have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise, and (ii) if a registration statement (which may be the Registration Statement) covering the issuance or resale of the Warrant Shares that are subject to an Exercise Notice is not available for the issuance or resale, as applicable, of such Warrant Shares and the Holder has submitted an Exercise Notice prior to receiving notice of the non-availability of such registration statement and the Company has not already delivered the Warrant Shares underlying such Exercise Notice electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit / Withdrawal At Custodian system, the Holder shall have the option, by delivery of notice to the Company, to (x) rescind such Exercise Notice in whole or in part and retain or have returned, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the rescission of an Exercise Notice shall not affect the Company’s obligation to make any payments that have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise, and/or (y) switch some or all of such Exercise Notice from a cash exercise to a Cashless Exercise.

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(d) **Cashless Exercise.** Notwithstanding anything contained herein to the contrary (other than Section 1(f) below), if at the time of exercise hereof a Registration Statement (as defined in the Registration Rights Agreement) is not effective (or the prospectus contained therein is not available for use) for the resale by the Holder of all of the Warrant Shares, then the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the “Net Number” of Warrant Shares determined according to the following formula (a “**Cashless Exercise**”):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A = the total number of shares with respect to which this Warrant is then being exercised.

B = as elected by the Holder: (i) the VWAP of the Common Stock on the Trading Day immediately preceding the date of the applicable Exercise Notice if such Exercise Notice is (1) both executed and delivered pursuant to Section 1(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 1(a) hereof on a Trading Day prior to the opening of “regular trading hours” (as defined in Rule 600(b)(64) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Exercise Notice or (z) the Bid Price of the Common Stock as of the time of the Holder’s execution of the applicable Exercise Notice if such Exercise Notice is executed during “regular trading hours” on a Trading Day and is delivered within two (2) hours thereafter pursuant to Section 1(a) hereof, or (iii) the Closing Sale Price of the Common Stock on the date of the applicable Exercise Notice if the date of such Exercise Notice is a Trading Day and such Exercise Notice is both executed and delivered pursuant to Section 1(a) hereof after the close of “regular trading hours” on such Trading Day.

C = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

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If the Warrant Shares are issued in a Cashless Exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, the Warrant Shares take on the registered characteristics of the Warrants being exercised. For purposes of Rule 144(d) promulgated under the 1933 Act, as in effect on the Subscription Date, it is intended that the Warrant Shares issued in a Cashless Exercise shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Securities Purchase Agreement.

(e) **Disputes.** In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the number of Warrant Shares to be issued pursuant to the terms hereof, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 15.

(f) **Limitations on Exercises.**

(i) **Reserved.**

(ii) **Principal Market Regulation.** The Company shall not issue any shares of Common Stock upon the exercise of this Warrant if the issuance of such shares of Common Stock (taken together with the issuance of such shares upon the conversion of the Preferred Shares (as defined in the Securities Purchase Agreement) or otherwise

pursuant to the terms of the Certificate of Designations (as defined in the Securities Purchase Agreement)) would exceed the aggregate number of shares of Common Stock which the Company may issue upon exercise or conversion or otherwise pursuant to the terms of the Certificate of Designations and the SPA Warrants without breaching the Company's obligations under the rules or regulations of the Principal Market (the number of shares which may be issued without violating such rules and regulations, the "Exchange Cap"), except that such limitation shall not apply in the event that the Company (A) obtains the approval of its stockholders as required by the applicable rules of the Principal Market for issuances of shares of Common Stock in excess of such amount or (B) obtains a written opinion from outside counsel to the Company that such approval is not required, which opinion shall be reasonably satisfactory to the Holder. Until such approval or such written opinion is obtained, no Buyer shall be issued in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any of the SPA Warrants or otherwise pursuant to the terms of the Certificate of Designations or the SPA Warrants, shares of Common Stock in an amount greater than the product of (i) the Exchange Cap as of the Issuance Date multiplied by (ii) the quotient of (1) the aggregate number of Preferred Shares issued to such Buyer pursuant to the Securities Purchase Agreement on the Closing Date (as defined in the Securities Purchase Agreement) divided by (2) the aggregate stated value of all Preferred Shares issued to the Buyers pursuant to the Securities Purchase Agreement on the Closing Date (with respect to each Buyer, the "Exchange Cap Allocation"). In the event that any Buyer shall sell or otherwise transfer any of such Buyer's SPA Warrants, the transferee shall be allocated a pro rata portion of such Buyer's Exchange Cap Allocation with respect to such portion of such SPA Warrants so transferred, and the restrictions of the prior sentence shall apply to such transferee with respect to the portion of the Exchange Cap Allocation so allocated to such transferee. Upon conversion and exercise in full of a holder's Preferred Shares and SPA Warrants, the difference (if any) between such holder's Exchange Cap Allocation and the number of shares of Common Stock actually issued to such holder upon such holder's conversion in full of such Preferred Shares and such holder's exercise in full of such SPA Warrants shall be allocated, to the respective Exchange Cap Allocations of the remaining holders of Preferred Shares and related SPA Warrants on a pro rata basis in proportion to the shares of Common Stock underlying the Preferred Shares and related SPA Warrants then held by each such holder of Preferred Shares and related SPA Warrants. In the event that after July 31, 2024, the Company is then prohibited from issuing any shares of Common Stock pursuant to this Section 1(f)(ii) (the "Exchange Cap Shares"), in lieu of issuing and delivering such Exchange Cap Shares to the Holder, the Company shall pay cash to the Holder in exchange for the cancellation of such portion of this Warrant exercisable into such Exchange Cap Shares (the "Exchange Cap Payment Amount") at a price equal to the sum of (x) the product of (A) such number of Exchange Cap Shares and (B) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date the Holder delivers the applicable Exercise Notice with respect to such Exchange Cap Shares to the Company and ending on the date of such payment under this Section 1(f)(ii) and (y) to the extent the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of Exchange Cap Shares, any brokerage commissions and other out-of-pocket expenses, if any, of the Holder incurred in connection therewith.

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(g) Reservation of Shares.

(i) Required Reserve Amount. Following the Stockholder Approval Date, so long as this Warrant remains outstanding, the Company shall at all times keep reserved for issuance under this Warrant a number of shares of Common Stock at least equal to 200% of the maximum number of shares of Common Stock as shall be necessary to satisfy the Company's obligation to issue shares of Common Stock under the SPA Warrants then outstanding (without regard to any limitations on exercise) (the "Required Reserve Amount"); provided that at no time shall the number of shares of Common Stock reserved pursuant to this Section 1(g)(i) be reduced other than proportionally in connection with any exercise or redemption of SPA Warrants or such other event covered by Section 2(a) below. The Required Reserve Amount (including, without limitation, each increase in the number of shares so reserved) shall be allocated pro rata among the holders of the SPA Warrants based on the number of shares of Common Stock issuable upon exercise of SPA Warrants held by each holder on the Closing Date (as defined in the Securities Purchase Agreement) (without regard to any limitations on exercise) or increase in the number of reserved shares, as the case may be (the "Authorized Share Allocation"). In the event that a holder shall sell or otherwise transfer any of such holder's SPA Warrants, each transferee shall be allocated a pro rata portion of such holder's Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any SPA Warrants shall be allocated to the remaining holders of SPA Warrants, pro rata based on the number of shares of Common Stock issuable upon exercise of the SPA Warrants then held by such holders (without regard to any limitations on exercise).

(ii) Insufficient Authorized Shares. If, notwithstanding Section 1(g)(i) above, and not in limitation thereof, at any time following the Stockholder Approval Date, while any of the SPA Warrants remain outstanding, the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve the Required Reserve Amount (an "Authorized Share Failure"), then the Company shall use its best efforts to take all action necessary to increase the Company's authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for all the SPA Warrants then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders' approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if at any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding shares of Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C. In the event that the Company is prohibited from issuing shares of Common Stock upon an exercise of this Warrant due to the failure by the Company to have sufficient shares of Common Stock available out of the authorized but unissued shares of Common Stock (such unavailability number of shares of Common Stock, the "Authorization Failure Shares"), in lieu of delivering such Authorization Failure Shares to the Holder, the Company shall pay cash in exchange for the cancellation of such portion of this Warrant exercisable into such Authorization Failure Shares at a price equal to the sum of (i) the product of (x) such number of Authorization Failure Shares and (y) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date the Holder delivers the applicable Exercise Notice with respect to such Authorization Failure Shares to the Company and ending on the date of such issuance and payment under this Section 1(g); and (ii) to the extent the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of Authorization Failure Shares, any Buy-In Payment Amount, brokerage commissions and other out-of-pocket expenses, if any, of the Holder incurred in connection therewith. Nothing contained in this Section 1(g) shall limit any obligations of the Company under any provision of the Securities Purchase Agreement.

2. Adjustment of Exercise Price and Number of Warrant Shares.

The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 2.

(a) Stock Dividends and Splits. Without limiting any provision of Section 2(b), Section 3 or Section 4, if the Company, at any time on or after the Subscription Date, (i) pays a stock dividend on one or more classes of its then outstanding shares of Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, other than Excluded Securities (as defined in the Securities Purchase Agreement), (ii) subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its then outstanding shares of Common Stock into a larger number of shares or (iii) combines (by combination, reverse stock split or otherwise) one or more classes of its then outstanding shares of Common Stock into a smaller number of shares then in each such case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this paragraph occurs during the period that an Exercise Price is calculated hereunder, then the calculation of such Exercise Price shall be adjusted appropriately to reflect such event.

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(b) Adjustment Upon Issuance of Shares of Common Stock. If and whenever on or after the Subscription Date, the Company grants, issues or sells (or enters into any agreement or publicly announces its intention to grant, issue or sell), or in accordance with this Section 2 is deemed to have granted, issued or sold, any shares of Common

Stock (including the issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding any Excluded Securities granted issued or sold or deemed to have been granted issued or sold) for a consideration per share (the “**New Issuance Price**”) less than a price equal to the Exercise Price in effect immediately prior to such granting, issuance or sale or deemed granting, issuance or sale (such Exercise Price then in effect is referred to herein as the “**Applicable Price**”) (the foregoing a “**Dilutive Issuance**”), then immediately after such Dilutive Issuance, the Exercise Price then in effect shall be reduced to an amount equal to the New Issuance Price. Simultaneously with any decrease in the Exercise Price pursuant to Section 2(b), the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein). For all purposes of the foregoing (including, without limitation, determining the adjusted Exercise Price and the New Issuance Price under this Section 2(b)), the following shall be applicable:

(i) **Issuance of Options.** If the Company in any manner grants, issues or sells (or enters into any agreement to grant, issue or sell) any Options and the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting, issuance or sale (or the time of execution of such agreement to grant, issue or sell, as applicable) of such Option for such price per share. For purposes of this Section 2(b)(i), the “lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting, issuance or sale (or pursuant to the agreement to grant, issue or sell, as applicable) of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such Option for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Option (or any other Person) upon the granting, issuance or sale (or the agreement to grant, issue or sell, as applicable) of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Option (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock or of such Convertible Securities upon the exercise of such Options or otherwise pursuant to the terms of or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

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(ii) **Issuance of Convertible Securities.** If the Company in any manner issues or sells (or enters into any agreement to issue or sell) any Convertible Securities and the lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale (or the time of execution of such agreement to issue or sell, as applicable) of such Convertible Securities for such price per share. For the purposes of this Section 2(b)(ii), the “lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to one share of Common Stock upon the issuance or sale (or pursuant to the agreement to issue or sell, as applicable) of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security or otherwise pursuant to the terms thereof and (y) the lowest conversion price set forth in such Convertible Security for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Convertible Security (or any other Person) upon the issuance or sale (or the agreement to issue or sell, as applicable) of such Convertible Security plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Convertible Security (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities or otherwise pursuant to the terms thereof, and if any such issuance or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of this Warrant has been or is to be made pursuant to other provisions of this Section 2(b), except as contemplated below, no further adjustment of the Exercise Price shall be made by reason of such issuance or sale.

(iii) **Change in Option Price or Rate of Conversion.** If the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares of Common Stock increases or decreases at any time (other than proportional changes in conversion or exercise prices, as applicable, in connection with an event referred to in Section 2(a)), the Exercise Price in effect at the time of such increase or decrease shall be adjusted to the Exercise Price which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 2(b)(iii), if the terms of any Option or Convertible Security (including, without limitation, any Option or Convertible Security that was outstanding as of the Subscription Date) are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 2(b) shall be made if such adjustment would result in an increase of the Exercise Price then in effect.

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(iv) **Calculation of Consideration Received.** If any Option and/or Convertible Security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company (as determined by the Holder, the “**Primary Security**”, and such Option and/or Convertible Security and/or Adjustment Right, the “**Secondary Securities**” and together with the Primary Security, each a “**Unit**”), together comprising one integrated transaction, the aggregate consideration per share of Common Stock with respect to such Primary Security shall be deemed to be the lower of (x) the purchase price of such Unit, (y) if such Primary Security is an Option and/or Convertible Security, the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise or conversion of the Primary Security in accordance with Sections 2(b)(i) or 2(b)(ii) above and (z) the lowest VWAP of the shares of Common Stock on any Trading Day during the five (5) Trading Day period (the “**Adjustment Period**”) immediately following the public announcement of such Dilutive Issuance (for the avoidance of doubt, if such public announcement is released prior to the opening of the Principal Market on a Trading Day, such Trading Day shall be the first Trading Day in such five Trading Day period and if this Warrant is exercised, on any given Exercise Date during any such Adjustment Period, solely with respect to such portion of this Warrant exercised on such applicable Exercise Date, such applicable Adjustment Period shall be deemed to have ended on, and included, the Trading Day immediately prior to such Exercise Date). If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount of consideration received by the Company therefor. If any shares of Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company for such securities will be the arithmetic average of the VWAPs of such security for each of the five (5) Trading Days immediately preceding the date of receipt. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities (as the case may be). The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Holder. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five (5) Trading Days after the tenth (10th) day following such Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Holder. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) **Record Date.** If the Company takes a record of the holders of shares of Common Stock for the purpose of entitling them (A) to receive a dividend or other

distribution payable in shares of Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase shares of Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issuance or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase (as the case may be).

(c) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to this Section 2, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein).

(d) Reserved.

(e) Stock Combination Event Adjustment. If at any time and from time to time on or after the Issuance Date there occurs any stock split, stock dividend, stock combination, reverse stock split, recapitalization or other similar transaction involving the outstanding Common Stock (each, a “**Stock Combination Event**”, and such date thereof, the “**Stock Combination Event Date**”) and the Event Market Price is less than the Exercise Price then in effect (after giving effect to the adjustment in clause 2(a) above), then on the sixteenth (16th) Trading Day immediately following such Stock Combination Event, the Exercise Price then in effect on such sixteenth (16th) Trading Day (after giving effect to the adjustment in clause 2(a) above) shall be reduced (but in no event increased) to the Event Market Price. For the avoidance of doubt, if the adjustment in the immediately preceding sentence would otherwise result in an increase in the Exercise Price hereunder, no adjustment shall be made.

(f) Other Events. In the event that the Company (or any Subsidiary (as defined in the Securities Purchase Agreement)) shall take any action to which the provisions hereof are not strictly applicable, or, if applicable, would not operate to protect the Holder from dilution or if any event occurs of the type contemplated by the provisions of this Section 2 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company’s board of directors shall in good faith determine and implement an appropriate adjustment in the Exercise Price and the number of Warrant Shares (if applicable) so as to protect the rights of the Holder, provided that no such adjustment pursuant to this Section 2(f) will increase the Exercise Price or decrease the number of Warrant Shares as otherwise determined pursuant to this Section 2, provided further that if the Holder does not accept such adjustments as appropriately protecting its interests hereunder against such dilution, then the Company’s board of directors and the Holder shall agree, in good faith, upon an independent investment bank of nationally recognized standing to make such appropriate adjustments, whose determination shall be final and binding absent manifest error and whose fees and expenses shall be borne by the Company.

(g) Calculations. All calculations under this Section 2 shall be made by rounding to the nearest cent or the nearest 1/100th of a share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issuance or sale of shares of Common Stock.

(h) Voluntary Adjustment By Company. Subject to the rules and regulations of the Principal Market, the Company may at any time during the term of this Warrant, with the prior written consent of the Required Holders (as defined in the Securities Purchase Agreement), reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the board of directors of the Company.

(i) Floor Price. No adjustment pursuant to this Section 2 shall cause the Exercise Price to be less than \$0.4506, which shall be reduced to 20% of the “Minimum Price” (as defined in Rule 5635 of the Rules of the Nasdaq Stock Market) on the Stockholder Approval Date (as defined in the Securities Purchase Agreement) if such price is lower (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the date of the Securities Purchase Agreement) (the “**Floor Price**”). Notwithstanding the foregoing, nothing contained in this Section 2(i) shall apply after Stockholder Approval (as defined in the Securities Purchase Agreement) is obtained and, on such Stockholder Approval Date, any adjustments that would have occurred hereunder prior to the Stockholder Approval Date, but for the existence of this Section 2(i), shall be applied pursuant to this Section 2 on the Stockholder Approval Date (without regard to the limitations in this Section 2(i) as if such event or Dilutive Issuance, as applicable, occurred on the Stockholder Approval Date.

3. Rights Upon Distribution of Assets. In addition to any adjustments pursuant to Section 2 above or Section 4(a) below, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “Distribution”), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder’s right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to the extent of any such excess) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. Purchase Rights; Fundamental Transactions

(a) Purchase Rights. In addition to any adjustments pursuant to Sections 2 or 3 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the “**Purchase Rights**”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issuance or sale of such Purchase Rights (provided, however, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) **Fundamental Transactions.** The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents (as defined in the Securities Purchase Agreement) in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, which is exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction) and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the consummation of each Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of the applicable Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of each Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the consummation of the applicable Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 3 and 4(a) above, which shall continue to be receivable thereafter)) issuable upon the exercise of this Warrant prior to the applicable Fundamental Transaction, such shares of publicly traded common stock (or its equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of the applicable Fundamental Transaction had this Warrant been exercised immediately prior to the applicable Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. Notwithstanding the foregoing, and without limiting Section 1(f) hereof, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 4(b) to permit the Fundamental Transaction without the assumption of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the consummation of each Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a "Corporate Event"), the Company shall make appropriate provision to insure that the Holder will thereafter have the right to receive upon an exercise of this Warrant at any time after the consummation of the applicable Fundamental Transaction but prior to the Expiration Date, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 3 and 4(a) above, which shall continue to be receivable thereafter)) issuable upon the exercise of the Warrant prior to such Fundamental Transaction, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the Holder would have been entitled to receive upon the happening of the applicable Fundamental Transaction had this Warrant been exercised immediately prior to the applicable Fundamental Transaction (without regard to any limitations on the exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder.

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(c) **Black Scholes Value.** Notwithstanding the foregoing and the provisions of Section 4(b) above, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Warrant. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction.

(d) **Application.** The provisions of this Section 4 shall apply similarly and equally to successive Fundamental Transactions and Corporate Events and shall be applied as if this Warrant (and any such subsequent warrants) were fully exercisable and without regard to any limitations on the exercise of this Warrant (provided that the Holder shall continue to be entitled to the benefit of the Maximum Percentage, applied however with respect to shares of capital stock registered under the 1934 Act and thereafter receivable upon exercise of this Warrant (or any such other warrant)).

5. Noncircumvention. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation (as defined in the Securities Purchase Agreement), Bylaws (as defined in the Securities Purchase Agreement) or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issuance or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (a) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, and (b) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable shares of Common Stock upon the exercise of this Warrant. Notwithstanding anything herein to the contrary, if after the sixty (60) calendar day anniversary of the Issuance Date, the Holder is not permitted to exercise this Warrant in full for any reason (other than pursuant to restrictions set forth in Section 1(f) hereof), the Company shall use its best efforts to promptly remedy such failure, including, without limitation, obtaining such consents or approvals as necessary to permit such exercise into shares of Common Stock.

6. Warrant Holder Not Deemed a Stockholder. Except as otherwise specifically provided herein, the Holder, solely in its capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of capital stock of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in its capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which it is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders; provided that the Company shall have no such obligation to the extent such information is filed with the SEC through EDGAR and are available to the public through the EDGAR system.

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7. Reissuance of Warrants.

(a) **Transfer of Warrant.** If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) **Lost, Stolen or Mutilated Warrant.** Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant (as to which a written certification and the indemnification contemplated below shall suffice as such evidence), and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary and reasonable form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) **Exchangeable for Multiple Warrants.** This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, no warrants for fractional shares of Common Stock shall be given.

(d) **Issuance of New Warrants.** Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

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

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

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8. Notices.

Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant (other than the issuance of shares of Common Stock upon exercise in accordance with the terms hereof), including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon each adjustment of the Exercise Price and the number of Warrant Shares, setting forth in reasonable detail, and certifying, the calculation of such adjustment(s), (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder, and (iii) at least ten (10) Trading Days prior to the consummation of any Fundamental Transaction. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of its Subsidiaries, the Company shall simultaneously file such notice with the SEC (as defined in the Securities Purchase Agreement) pursuant to a Current Report on Form 8-K. If the Company or any of its Subsidiaries provides material non-public information to the Holder that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. It is expressly understood and agreed that the time of execution specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. Disclosure. Upon delivery by the Company to the Holder (or receipt by the Company from the Holder) of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall on or prior to 9:00 am, New York City time on the Business Day immediately following such notice delivery date, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its Subsidiaries, the Company so shall indicate to the Holder explicitly in writing in such notice (or immediately upon receipt of notice from the Holder, as applicable), and in the absence of any such written indication in such notice (or notification from the Company immediately upon receipt of notice from the Holder), the Holder shall be entitled to presume that information contained in the notice does not constitute material, non-public information relating to the Company or any of its Subsidiaries. Nothing contained in this Section 9 shall limit any obligations of the Company, or any rights of the Holder, under Section 4(i) of the Securities Purchase Agreement.

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10. Absence of Trading and Disclosure Restrictions. The Company acknowledges and agrees that the Holder is not a fiduciary or agent of the Company and that the Holder shall have no obligation to (a) maintain the confidentiality of any information provided by the Company or (b) refrain from trading any securities while in possession of such information in the absence of a written non-disclosure agreement signed by an officer of the Holder that explicitly provides for such confidentiality and trading restrictions. In the absence of such an executed, written non-disclosure agreement, the Company acknowledges that the Holder may freely trade in any securities issued by the Company, may possess and use any information provided by the Company in connection with such trading activity, and may disclose any such information to any third party.

11. Amendment and Waiver. Except as otherwise provided herein, the provisions of this Warrant (other than Section 1(f)) may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party.

12. Severability. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Governing Law. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at the address set forth in Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or

other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

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14. Construction; Headings. This Warrant shall be deemed to be jointly drafted by the Company and the Holder and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant. Terms used in this Warrant but defined in the other Transaction Documents shall have the meanings ascribed to such terms on the Closing Date (as defined in the Securities Purchase Agreement) in such other Transaction Documents unless otherwise consented to in writing by the Holder.

15. Dispute Resolution.

(a) Submission to Dispute Resolution.

(i) In the case of a dispute relating to the Exercise Price, the Closing Sale Price, the Bid Price, Black Scholes Consideration Value, Black Scholes Value or fair market value or the arithmetic calculation of the number of Warrant Shares (as the case may be) (including, without limitation, a dispute relating to the determination of any of the foregoing), the Company or the Holder (as the case may be) shall submit the dispute to the other party via facsimile (A) if by the Company, within two (2) Business Days after the occurrence of the circumstances giving rise to such dispute or (B) if by the Holder, at any time after the Holder learned of the circumstances giving rise to such dispute. If the Holder and the Company are unable to promptly resolve such dispute relating to such Exercise Price, such Closing Sale Price, such Bid Price, such Black Scholes Consideration Value, Black Scholes Value or such fair market value or such arithmetic calculation of the number of Warrant Shares (as the case may be), at any time after the second (2nd) Business Day following such initial notice by the Company or the Holder (as the case may be) of such dispute to the Company or the Holder (as the case may be), then the Holder may, at its sole option, select an independent, reputable investment bank to resolve such dispute.

(ii) The Holder and the Company shall each deliver to such investment bank (A) a copy of the initial dispute submission so delivered in accordance with the first sentence of this Section 15 and (B) written documentation supporting its position with respect to such dispute, in each case, no later than 5:00 p.m. (New York time) by the fifth (5th) Business Day immediately following the date on which the Holder selected such investment bank (the “**Dispute Submission Deadline**”) (the documents referred to in the immediately preceding clauses (A) and (B) are collectively referred to herein as the “**Required Dispute Documentation**”) (it being understood and agreed that if either the Holder or the Company fails to so deliver all of the Required Dispute Documentation by the Dispute Submission Deadline, then the party who fails to so submit all of the Required Dispute Documentation shall no longer be entitled to (and hereby waives its right to) deliver or submit any written documentation or other support to such investment bank with respect to such dispute and such investment bank shall resolve such dispute based solely on the Required Dispute Documentation that was delivered to such investment bank prior to the Dispute Submission Deadline). Unless otherwise agreed to in writing by both the Company and the Holder or otherwise requested by such investment bank, neither the Company nor the Holder shall be entitled to deliver or submit any written documentation or other support to such investment bank in connection with such dispute (other than the Required Dispute Documentation).

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(iii) The Company and the Holder shall cause such investment bank to determine the resolution of such dispute and notify the Company and the Holder of such resolution no later than ten (10) Business Days immediately following the Dispute Submission Deadline. The fees and expenses of such investment bank shall be borne solely by the Company, and such investment bank’s resolution of such dispute shall be final and binding upon all parties absent manifest error.

(b) Miscellaneous. The Company expressly acknowledges and agrees that (i) this Section 15 constitutes an agreement to arbitrate between the Company and the Holder (and constitutes an arbitration agreement) under the rules then in effect under § 7501, et seq. of the New York Civil Practice Law and Rules (“**CPLR**”) and that the Holder is authorized to apply for an order to compel arbitration pursuant to CPLR § 7503(a) in order to compel compliance with this Section 15, (ii) the terms of this Warrant and each other applicable Transaction Document shall serve as the basis for the selected investment bank’s resolution of the applicable dispute, such investment bank shall be entitled (and is hereby expressly authorized) to make all findings, determinations and the like that such investment bank determines are required to be made by such investment bank in connection with its resolution of such dispute, (iii) the Holder (and only the Holder), in its sole discretion, shall have the right to submit any dispute described in this Section 15 to any state or federal court sitting in The City of New York, Borough of Manhattan in lieu of utilizing the procedures set forth in this Section 15 and (iv) nothing in this Section 15 shall limit the Holder from obtaining any injunctive relief or other equitable remedies (including, without limitation, with respect to any matters described in this Section 15).

16. Remedies, Characterization, Other Obligations, Breaches and Injunctive Relief The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual and consequential damages for any failure by the Company to comply with the terms of this Warrant. The Company covenants to the Holder that there shall be no characterization concerning this instrument other than as expressly provided herein. Amounts set forth or provided for herein with respect to payments, exercises and the like (and the computation thereof) shall be the amounts to be received by the Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to specific performance and/or temporary, preliminary and permanent injunctive or other equitable relief from any court of competent jurisdiction in any such case without the necessity of proving actual damages and without posting a bond or other security. The Company shall provide all information and documentation to the Holder that is requested by the Holder to enable the Holder to confirm the Company’s compliance with the terms and conditions of this Warrant (including, without limitation, compliance with Section 2 hereof). The issuance of shares and certificates for shares as contemplated hereby upon the exercise of this Warrant shall be made without charge to the Holder or such shares for any issuance tax or other costs in respect thereof, provided that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than the Holder or its agent on its behalf.

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17. Payment of Collection, Enforcement and Other Costs. If (a) this Warrant is placed in the hands of an attorney for collection or enforcement or is collected or enforced through any legal proceeding or the holder otherwise takes action to collect amounts due under this Warrant or to enforce the provisions of this Warrant or (b) there occurs any bankruptcy, reorganization, receivership of the company or other proceedings affecting company creditors’ rights and involving a claim under this Warrant, then the Company shall pay the costs incurred by the Holder for such collection, enforcement or action or in connection with such bankruptcy, reorganization, receivership or other proceeding, including, without limitation, attorneys’ fees and disbursements.

18. Transfer. This Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company, except as may otherwise be required by Section 2(g) of the Securities Purchase Agreement and applicable securities laws.

19. Certain Definitions. For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**1933 Act**” means the Securities Act of 1933, as amended, and the rules and regulations thereunder.

(b) “1934 Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

(c) “Adjustment Right” means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale in accordance with Section 2) of Common Stock (other than rights of the type described in Section 4 hereof) that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(d) “Affiliate” means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that “control” of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(e) “Attribution Parties” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

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(f) “Bid Price” means, for any security as of the particular time of determination, the bid price for such security on the Principal Market as reported by Bloomberg as of such time of determination, or, if the Principal Market is not the principal securities exchange or trading market for such security, the bid price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg as of such time of determination, or if the foregoing does not apply, the bid price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg as of such time of determination, or, if no bid price is reported for such security by Bloomberg as of such time of determination, the average of the bid prices of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices) as of such time of determination. If the Bid Price cannot be calculated for a security as of the particular time of determination on any of the foregoing bases, the Bid Price of such security as of such time of determination shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(g) “Black Scholes Consideration Value” means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 60 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

(h) “Black Scholes Value” means the value of the unexercised portion of this Warrant remaining on the date of the Holder’s request pursuant to Section 4(c)(i), which value is calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the greater of (1) the highest Closing Sale Price of the Common Stock during the period beginning on the Trading Day immediately preceding the announcement of the applicable Fundamental Transaction (or the consummation of the applicable Fundamental Transaction, if earlier) and ending on the Trading Day of the Holder’s request pursuant to Section 4(c)(i) and (2) the sum of the price per share being offered in cash in the applicable Fundamental Transaction (if any) plus the value of the non-cash consideration being offered in the applicable Fundamental Transaction (if any), (ii) a strike price equal to the Exercise Price in effect on the date of the Holder’s request pursuant to Section 4(c)(i), (iii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the greater of (1) the remaining term of this Warrant as of the date of the Holder’s request pursuant to Section 4(c)(i) and (2) the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction or as of the date of the Holder’s request pursuant to Section 4(c)(i) if such request is prior to the date of the consummation of the applicable Fundamental Transaction, (iv) a zero cost of borrow and (v) an expected volatility equal to the greater of 100% and the 60 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the earliest to occur of (A) the public disclosure of the applicable Fundamental Transaction and (B) the date of the Holder’s request pursuant to Section 4(c)(i).

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(i) “Bloomberg” means Bloomberg, L.P.

(j) “Business Day” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(k) “Closing Sale Price” means, for any security as of any date, the last closing trade price for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing trade price, then the last trade price of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last trade price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing does not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no last trade price is reported for such security by Bloomberg, the average of the ask prices of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(l) “Common Stock” means (i) the Company’s shares of common stock, \$0.0001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any capital stock resulting from a reclassification of such common stock.

(m) “Convertible Securities” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any Common Stock.

(n) “Eligible Market” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or the Principal Market.

(o) “**Event Market Price**” means, with respect to any Stock Combination Event Date, the quotient determined by dividing (x) the sum of the VWAP of the Common Stock for each of the five (5) lowest Trading Days during the twenty (20) consecutive Trading Day period ending and including the Trading Day immediately preceding the sixteenth (16th) Trading Day after such Stock Combination Event Date, divided by (y) five (5). All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

(p) “**Expiration Date**” means the date that is the fifth (5th) anniversary of the Issuance Date or, if such date falls on a day other than a Trading Day or on which trading does not take place on the Principal Market (a “**Holiday**”), the next date that is not a Holiday.

(q) “**Fundamental Transaction**” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock not held by all such Subject Entities as of the date of this Warrant calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(r) “**Group**” means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(s) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(t) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(u) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity or a government or any department or agency thereof.

(v) “**Principal Market**” means the Nasdaq Capital Market.

(w) “**Registration Rights Agreement**” means that certain registration rights agreement, dated as of the Closing Date, by and among the Company and the Buyers of the Preferred Shares and SPA Warrants relating to, among other things, the registration of the resale of the shares of Common Stock issuable upon conversion of the Preferred Shares or otherwise pursuant to the terms of the Certificate of Designations and exercise of the SPA Warrants, as may be amended from time to time.

(x) “**SEC**” means the United States Securities and Exchange Commission or the successor thereto.

(y) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(z) “**Successor Entity**” means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(aa) “**Trading Day**” means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price or trading volume determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(bb) “**VWAP**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded), during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg through its “VAP” function (set to 09:30 start time and 16:00 end time) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted

average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

[Signature page follows.]

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IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

COMPANY:

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

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Exhibit A

**EXERCISE NOTICE
TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK
MYMD PHARMACEUTICALS, INC.**

The undersigned holder hereby elects to exercise the Warrant to Purchase Common Stock No. _____ (the "Warrant") of MYMD PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), as specified below. Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. **Form of Exercise Price.** The Holder intends that payment of the Aggregate Exercise Price shall be made as:

- a "Cash Exercise" with respect to _____ Warrant Shares; and/or
 a "Cashless Exercise" with respect to _____ Warrant Shares.

In the event that the Holder has elected a Cashless Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the Holder hereby represents and warrants that (i) this Exercise Notice was executed by the Holder at _____ [a.m.][p.m.] on the date set forth below and (ii) if applicable, the Bid Price as of such time of execution of this Exercise Notice was \$_____.

2. **Payment of Exercise Price.** In the event that the Holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the Holder shall pay the Aggregate Exercise Price in the sum of \$_____ to the Company in accordance with the terms of the Warrant.

3. **Delivery of Warrant Shares.** The Company shall deliver to Holder, or its designee or agent as specified below, _____ shares of Common Stock in accordance with the terms of the Warrant. Delivery shall be made to Holder, or for its benefit, as follows:

Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: _____

Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant: _____

DTC Number: _____

Account Number: _____

Date: _____,

Name of Registered Holder

By: _____

Name: _____

Title: _____

Tax ID: _____

Facsimile: _____

E-mail Address: _____

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs _____ to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated _____, 202_, from the Company and acknowledged and agreed to by _____.

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

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 TO THE HOLDER (IF REQUESTED BY THE COMPANY), IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD OR ELIGIBLE TO BE 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.

Form of Warrant

MYMD PHARMACEUTICALS, INC.

Warrant To Purchase Common Stock

Date of Issuance: [●], 2024 (“**Issuance Date**”)

MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, _____, the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, upon exercise of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the “**Warrant**”), at any time or times on or after the Issuance Date, but not after 11:59 p.m., New York time, on the Expiration Date (as defined below), _____ (subject to adjustment as provided herein) fully paid and non-assessable shares of Common Stock (as defined below) (the “**Warrant Shares**”, and such number of Warrant Shares, the “**Warrant Number**”). Except as otherwise defined herein, capitalized terms in this Warrant shall have the meanings set forth in Section 19. This Warrant is one of the Warrants to Purchase Common Stock (the “**SPA Warrants**”) issued pursuant to Section 1 of that certain Securities Purchase Agreement, dated as of May 20, 2024 (the “**Subscription Date**”), by and among the Company and the investors (the “**Buyers**”) referred to therein, as amended from time to time (the “**Securities Purchase Agreement**”).

1. Exercise of Warrant.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder on any day on or after the Issuance Date (an “**Exercise Date**”), in whole or in part, by delivery (whether via facsimile or otherwise) of a written notice, in the form attached hereto as **Exhibit A** (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant. Within one (1) Trading Day following an exercise of this Warrant as aforesaid, the Holder shall deliver payment to the Company of an amount equal to the Exercise Price in effect on the date of such exercise multiplied by the number of Warrant Shares as to which this Warrant was so exercised (the “**Aggregate Exercise Price**”) in cash or via wire transfer of immediately available funds if the Holder did not notify the Company in such Exercise Notice that such exercise was made pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original of this Warrant in order to effect an exercise hereunder. Execution and delivery of an Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original of this Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. Execution and delivery of an Exercise Notice for all of the then-remaining Warrant Shares shall have the same effect as cancellation of the original of this Warrant after delivery of the Warrant Shares in accordance with the terms hereof. On or before the first (1st) Trading Day following the date on which the Company has received an Exercise Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation of receipt of such Exercise Notice, in the form attached hereto as **Exhibit B**, to the Holder and the Company’s transfer agent (the “**Transfer Agent**”), which confirmation shall constitute an instruction to the Transfer Agent to process such Exercise Notice in accordance with the terms herein. On or before the first (1st) Trading Day following the date on which the Company has received such Exercise Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade of such Warrant Shares initiated on the applicable Exercise Date), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program (“**FAST**”) and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal at Custodian system, or (Y) if the Transfer Agent is not participating in the DTC FAST, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Exercise Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such exercise. Upon delivery of an Exercise Notice, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the certificates evidencing such Warrant Shares (as the case may be). If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise and upon surrender of this Warrant to the Company by the Holder, then, at the request of the Holder, the Company shall as soon as practicable and in no event later than two (2) Business Days after any exercise and at its own expense, issue and deliver to the Holder (or its designee) a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional shares of Common Stock are to be issued upon the exercise of this Warrant, but rather the number of shares of Common Stock to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Transfer Agent) that may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. Notwithstanding the foregoing, except in the case where an exercise of this Warrant is validly made pursuant to a Cashless Exercise, the Company’s failure to deliver Warrant Shares to the Holder on or prior to the later of (i) two (2) Trading Days after receipt of the applicable Exercise Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade of such Warrant Shares initiated on the applicable Exercise Date) and (ii) one (1) Trading Day after the Company’s receipt of the Aggregate Exercise Price (or valid notice of a Cashless Exercise if permissible) (such later date, the “**Share Delivery Date**”) shall not be deemed to be a breach of this Warrant.

(b) Exercise Price. For purposes of this Warrant, “**Exercise Price**” means \$1.816, subject to adjustment as provided herein.

(c) Company’s Failure to Timely Deliver Securities. If the Company shall fail, for any reason or for no reason, on or prior to the Share Delivery Date, either (I) if the Transfer Agent is not participating in FAST, to issue and deliver to the Holder (or its designee) a certificate for the number of Warrant Shares to which the Holder is entitled and register such Warrant Shares on the Company’s share register or, if the Transfer Agent is participating in FAST and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, to credit the balance account of the Holder or the Holder’s designee with DTC for such number of Warrant Shares to which the Holder is entitled upon the Holder’s exercise of this Warrant (as the case may be) or (II) if a Registration Statement covering the resale of the Warrant Shares that are the subject of the Exercise Notice (the “**Unavailable Warrant Shares**”) is not available for the resale of such Unavailable Warrant Shares and the Company fails to promptly (x) so notify the Holder and (y) deliver the Warrant Shares electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal At Custodian system (the event described in the

immediately foregoing clause (II) is hereinafter referred to as a “**Notice Failure**” and together with the event described in clause (I) above, a “**Delivery Failure**”), then, in addition to all other remedies available to the Holder, (X) the Company shall pay in cash to the Holder on each day after the Share Delivery Date and during such Delivery Failure an amount equal to 2% of the product of (A) the sum of the number of shares of Common Stock not issued to the Holder on or prior to the Share Delivery Date and to which the Holder is entitled, multiplied by (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable Exercise Date and ending on the applicable Share Delivery Date, and (Y) the Holder, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the voiding of an Exercise Notice shall not affect the Company’s obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date either (I) the Transfer Agent is not participating in the DTC FAST, the Company shall fail to issue and deliver to the Holder (or its designee) a certificate and register such shares of Common Stock on the Company’s share register or, if the Transfer Agent is participating in the DTC FAST and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, the Transfer Agent shall fail to credit the balance account of the Holder or the Holder’s designee with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder’s exercise hereunder or pursuant to the Company’s obligation pursuant to clause (ii) below or (II) a Notice Failure occurs, and if on or after such Share Delivery Date the Holder acquires (in an open market transaction, stock loan or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such exercise that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Delivery Failure or Notice Failure, as applicable (a “**Buy-In**”), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after the Holder’s request and in the Holder’s discretion, either (i) pay cash to the Holder in an amount equal to the Holder’s total purchase price (including brokerage commissions, stock loan costs and other out-of-pocket expenses, if any) for the shares of Common Stock so acquired (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the “**Buy-In Price**”), at which point the Company’s obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder’s exercise hereunder (as the case may be) (and to issue such Warrant Shares) shall terminate, or (ii) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such Warrant Shares or credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder’s exercise hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of Warrant Shares multiplied by (B) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Exercise Notice and ending on the date of such issuance and payment under this clause (ii) (the “**Buy-In Payment Amount**”). Nothing shall limit the Holder’s right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of this Warrant as required pursuant to the terms hereof. While this Warrant is outstanding, the Company shall cause its transfer agent to participate in FAST. In addition to the foregoing rights, (i) if the Company fails to deliver the applicable number of Warrant Shares upon an exercise pursuant to Section 1 by the applicable Share Delivery Date, then the Holder shall have the right to rescind such exercise in whole or in part and retain and/or have the Company return, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the rescission of an exercise shall not affect the Company’s obligation to make any payments that have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise, and (ii) if a registration statement (which may be the Registration Statement) covering the issuance or resale of the Warrant Shares that are subject to an Exercise Notice is not available for the issuance or resale, as applicable, of such Warrant Shares and the Holder has submitted an Exercise Notice prior to receiving notice of the non-availability of such registration statement and the Company has not already delivered the Warrant Shares underlying such Exercise Notice electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit / Withdrawal At Custodian system, the Holder shall have the option, by delivery of notice to the Company, to (x) rescind such Exercise Notice in whole or in part and retain or have returned, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the rescission of an Exercise Notice shall not affect the Company’s obligation to make any payments that have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise, and/or (y) switch some or all of such Exercise Notice from a cash exercise to a Cashless Exercise.

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(d) **Cashless Exercise.** Notwithstanding anything contained herein to the contrary (other than Section 1(f) below), if at the time of exercise hereof a Registration Statement (as defined in the Registration Rights Agreement) is not effective (or the prospectus contained therein is not available for use) for the resale by the Holder of all of the Warrant Shares, then the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the “Net Number” of Warrant Shares determined according to the following formula (a “**Cashless Exercise**”):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A = the total number of shares with respect to which this Warrant is then being exercised.

B = as elected by the Holder: (i) the VWAP of the Common Stock on the Trading Day immediately preceding the date of the applicable Exercise Notice if such Exercise Notice is (1) both executed and delivered pursuant to Section 1(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 1(a) hereof on a Trading Day prior to the opening of “regular trading hours” (as defined in Rule 600(b)(64) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Exercise Notice or (z) the Bid Price of the Common Stock as of the time of the Holder’s execution of the applicable Exercise Notice if such Exercise Notice is executed during “regular trading hours” on a Trading Day and is delivered within two (2) hours thereafter pursuant to Section 1(a) hereof, or (iii) the Closing Sale Price of the Common Stock on the date of the applicable Exercise Notice if the date of such Exercise Notice is a Trading Day and such Exercise Notice is both executed and delivered pursuant to Section 1(a) hereof after the close of “regular trading hours” on such Trading Day.

C = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

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If the Warrant Shares are issued in a Cashless Exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, the Warrant Shares take on the registered characteristics of the Warrants being exercised. For purposes of Rule 144(d) promulgated under the 1933 Act, as in effect on the Subscription Date, it is intended that the Warrant Shares issued in a Cashless Exercise shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Securities Purchase Agreement.

(e) **Disputes.** In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the number of Warrant Shares to be issued pursuant to the terms hereof, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 15.

(f) **Limitations on Exercises.**

(i) **Reserved.**

(ii) **Principal Market Regulation.** The Company shall not issue any shares of Common Stock upon the exercise of this Warrant if the issuance of such shares of Common Stock (taken together with the issuance of such shares upon the conversion of the Preferred Shares (as defined in the Securities Purchase Agreement) or otherwise

pursuant to the terms of the Certificate of Designations (as defined in the Securities Purchase Agreement)) would exceed the aggregate number of shares of Common Stock which the Company may issue upon exercise or conversion or otherwise pursuant to the terms of the Certificate of Designations and the SPA Warrants without breaching the Company's obligations under the rules or regulations of the Principal Market (the number of shares which may be issued without violating such rules and regulations, the "Exchange Cap"), except that such limitation shall not apply in the event that the Company (A) obtains the approval of its stockholders as required by the applicable rules of the Principal Market for issuances of shares of Common Stock in excess of such amount or (B) obtains a written opinion from outside counsel to the Company that such approval is not required, which opinion shall be reasonably satisfactory to the Holder. Until such approval or such written opinion is obtained, no Buyer shall be issued in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any of the SPA Warrants or otherwise pursuant to the terms of the Certificate of Designations or the SPA Warrants, shares of Common Stock in an amount greater than the product of (i) the Exchange Cap as of the Issuance Date multiplied by (ii) the quotient of (1) the aggregate number of Preferred Shares issued to such Buyer pursuant to the Securities Purchase Agreement on the Closing Date (as defined in the Securities Purchase Agreement) divided by (2) the aggregate stated value of all Preferred Shares issued to the Buyers pursuant to the Securities Purchase Agreement on the Closing Date (with respect to each Buyer, the "Exchange Cap Allocation"). In the event that any Buyer shall sell or otherwise transfer any of such Buyer's SPA Warrants, the transferee shall be allocated a pro rata portion of such Buyer's Exchange Cap Allocation with respect to such portion of such SPA Warrants so transferred, and the restrictions of the prior sentence shall apply to such transferee with respect to the portion of the Exchange Cap Allocation so allocated to such transferee. Upon conversion and exercise in full of a holder's Preferred Shares and SPA Warrants, the difference (if any) between such holder's Exchange Cap Allocation and the number of shares of Common Stock actually issued to such holder upon such holder's conversion in full of such Preferred Shares and such holder's exercise in full of such SPA Warrants shall be allocated, to the respective Exchange Cap Allocations of the remaining holders of Preferred Shares and related SPA Warrants on a pro rata basis in proportion to the shares of Common Stock underlying the Preferred Shares and related SPA Warrants then held by each such holder of Preferred Shares and related SPA Warrants. In the event that after July 31, 2024, the Company is then prohibited from issuing any shares of Common Stock pursuant to this Section 1(f)(ii) (the "Exchange Cap Shares"), in lieu of issuing and delivering such Exchange Cap Shares to the Holder, the Company shall pay cash to the Holder in exchange for the cancellation of such portion of this Warrant exercisable into such Exchange Cap Shares (the "Exchange Cap Payment Amount") at a price equal to the sum of (x) the product of (A) such number of Exchange Cap Shares and (B) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date the Holder delivers the applicable Exercise Notice with respect to such Exchange Cap Shares to the Company and ending on the date of such payment under this Section 1(f)(ii) and (y) to the extent the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of Exchange Cap Shares, any brokerage commissions and other out-of-pocket expenses, if any, of the Holder incurred in connection therewith.

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(g) Reservation of Shares.

(i) Required Reserve Amount. Following the Stockholder Approval Date, so long as this Warrant remains outstanding, the Company shall at all times keep reserved for issuance under this Warrant a number of shares of Common Stock at least equal to 200% of the maximum number of shares of Common Stock as shall be necessary to satisfy the Company's obligation to issue shares of Common Stock under the SPA Warrants then outstanding (without regard to any limitations on exercise) (the "Required Reserve Amount"); provided that at no time shall the number of shares of Common Stock reserved pursuant to this Section 1(g)(i) be reduced other than proportionally in connection with any exercise or redemption of SPA Warrants or such other event covered by Section 2(a) below. The Required Reserve Amount (including, without limitation, each increase in the number of shares so reserved) shall be allocated pro rata among the holders of the SPA Warrants based on the number of shares of Common Stock issuable upon exercise of SPA Warrants held by each holder on the Closing Date (as defined in the Securities Purchase Agreement) (without regard to any limitations on exercise) or increase in the number of reserved shares, as the case may be (the "Authorized Share Allocation"). In the event that a holder shall sell or otherwise transfer any of such holder's SPA Warrants, each transferee shall be allocated a pro rata portion of such holder's Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any SPA Warrants shall be allocated to the remaining holders of SPA Warrants, pro rata based on the number of shares of Common Stock issuable upon exercise of the SPA Warrants then held by such holders (without regard to any limitations on exercise).

(ii) Insufficient Authorized Shares. If, notwithstanding Section 1(g)(i) above, and not in limitation thereof, at any time following the Stockholder Approval Date, while any of the SPA Warrants remain outstanding, the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve the Required Reserve Amount (an "Authorized Share Failure"), then the Company shall use its best efforts to take all action necessary to increase the Company's authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for all the SPA Warrants then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders' approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if at any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding shares of Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C. In the event that the Company is prohibited from issuing shares of Common Stock upon an exercise of this Warrant due to the failure by the Company to have sufficient shares of Common Stock available out of the authorized but unissued shares of Common Stock (such unavailability number of shares of Common Stock, the "Authorization Failure Shares"), in lieu of delivering such Authorization Failure Shares to the Holder, the Company shall pay cash in exchange for the cancellation of such portion of this Warrant exercisable into such Authorization Failure Shares at a price equal to the sum of (i) the product of (x) such number of Authorization Failure Shares and (y) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date the Holder delivers the applicable Exercise Notice with respect to such Authorization Failure Shares to the Company and ending on the date of such issuance and payment under this Section 1(g); and (ii) to the extent the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of Authorization Failure Shares, any Buy-In Payment Amount, brokerage commissions and other out-of-pocket expenses, if any, of the Holder incurred in connection therewith. Nothing contained in this Section 1(g) shall limit any obligations of the Company under any provision of the Securities Purchase Agreement.

2. Adjustment of Exercise Price and Number of Warrant Shares.

The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 2.

(a) Stock Dividends and Splits. Without limiting any provision of Section 2(b), Section 3 or Section 4, if the Company, at any time on or after the Subscription Date, (i) pays a stock dividend on one or more classes of its then outstanding shares of Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, other than Excluded Securities (as defined in the Securities Purchase Agreement), (ii) subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its then outstanding shares of Common Stock into a larger number of shares or (iii) combines (by combination, reverse stock split or otherwise) one or more classes of its then outstanding shares of Common Stock into a smaller number of shares then in each such case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this paragraph occurs during the period that an Exercise Price is calculated hereunder, then the calculation of such Exercise Price shall be adjusted appropriately to reflect such event.

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(b) Adjustment Upon Issuance of Shares of Common Stock. If and whenever on or after the Subscription Date, the Company grants, issues or sells (or enters into any agreement or publicly announces its intention to grant, issue or sell), or in accordance with this Section 2 is deemed to have granted, issued or sold, any shares of Common

Stock (including the issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding any Excluded Securities granted issued or sold or deemed to have been granted issued or sold) for a consideration per share (the “**New Issuance Price**”) less than a price equal to the Exercise Price in effect immediately prior to such granting, issuance or sale or deemed granting, issuance or sale (such Exercise Price then in effect is referred to herein as the “**Applicable Price**”) (the foregoing a “**Dilutive Issuance**”), then immediately after such Dilutive Issuance, the Exercise Price then in effect shall be reduced to an amount equal to the New Issuance Price. Simultaneously with any decrease in the Exercise Price pursuant to Section 2(b), the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein). For all purposes of the foregoing (including, without limitation, determining the adjusted Exercise Price and the New Issuance Price under this Section 2(b)), the following shall be applicable:

(i) **Issuance of Options.** If the Company in any manner grants, issues or sells (or enters into any agreement to grant, issue or sell) any Options and the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting, issuance or sale (or the time of execution of such agreement to grant, issue or sell, as applicable) of such Option for such price per share. For purposes of this Section 2(b)(i), the “lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting, issuance or sale (or pursuant to the agreement to grant, issue or sell, as applicable) of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such Option for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Option (or any other Person) upon the granting, issuance or sale (or the agreement to grant, issue or sell, as applicable) of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Option (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock or of such Convertible Securities upon the exercise of such Options or otherwise pursuant to the terms of or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

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(ii) **Issuance of Convertible Securities.** If the Company in any manner issues or sells (or enters into any agreement to issue or sell) any Convertible Securities and the lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale (or the time of execution of such agreement to issue or sell, as applicable) of such Convertible Securities for such price per share. For the purposes of this Section 2(b)(ii), the “lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to one share of Common Stock upon the issuance or sale (or pursuant to the agreement to issue or sell, as applicable) of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security or otherwise pursuant to the terms thereof and (y) the lowest conversion price set forth in such Convertible Security for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Convertible Security (or any other Person) upon the issuance or sale (or the agreement to issue or sell, as applicable) of such Convertible Security plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Convertible Security (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities or otherwise pursuant to the terms thereof, and if any such issuance or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of this Warrant has been or is to be made pursuant to other provisions of this Section 2(b), except as contemplated below, no further adjustment of the Exercise Price shall be made by reason of such issuance or sale.

(iii) **Change in Option Price or Rate of Conversion.** If the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares of Common Stock increases or decreases at any time (other than proportional changes in conversion or exercise prices, as applicable, in connection with an event referred to in Section 2(a)), the Exercise Price in effect at the time of such increase or decrease shall be adjusted to the Exercise Price which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 2(b)(iii), if the terms of any Option or Convertible Security (including, without limitation, any Option or Convertible Security that was outstanding as of the Subscription Date) are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 2(b) shall be made if such adjustment would result in an increase of the Exercise Price then in effect.

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(iv) **Calculation of Consideration Received.** If any Option and/or Convertible Security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company (as determined by the Holder, the “**Primary Security**”), and such Option and/or Convertible Security and/or Adjustment Right, the “**Secondary Securities**” and together with the Primary Security, each a “**Unit**”), together comprising one integrated transaction, the aggregate consideration per share of Common Stock with respect to such Primary Security shall be deemed to be the lower of (x) the purchase price of such Unit, (y) if such Primary Security is an Option and/or Convertible Security, the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise or conversion of the Primary Security in accordance with Sections 2(b)(i) or 2(b)(ii) above and (z) the lowest VWAP of the shares of Common Stock on any Trading Day during the five (5) Trading Day period (the “**Adjustment Period**”) immediately following the public announcement of such Dilutive Issuance (for the avoidance of doubt, if such public announcement is released prior to the opening of the Principal Market on a Trading Day, such Trading Day shall be the first Trading Day in such five Trading Day period and if this Warrant is exercised, on any given Exercise Date during any such Adjustment Period, solely with respect to such portion of this Warrant exercised on such applicable Exercise Date, such applicable Adjustment Period shall be deemed to have ended on, and included, the Trading Day immediately prior to such Exercise Date). If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount of consideration received by the Company therefor. If any shares of Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company for such securities will be the arithmetic average of the VWAPs of such security for each of the five (5) Trading Days immediately preceding the date of receipt. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities (as the case may be). The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Holder. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five (5) Trading Days after the tenth (10th) day following such Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Holder. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) **Record Date.** If the Company takes a record of the holders of shares of Common Stock for the purpose of entitling them (A) to receive a dividend or other

distribution payable in shares of Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase shares of Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issuance or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase (as the case may be).

(c) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to this Section 2, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein).

(d) Reserved.

(e) Stock Combination Event Adjustment. If at any time and from time to time on or after the Issuance Date there occurs any stock split, stock dividend, stock combination, reverse stock split, recapitalization or other similar transaction involving the outstanding Common Stock (each, a “**Stock Combination Event**”, and such date thereof, the “**Stock Combination Event Date**”) and the Event Market Price is less than the Exercise Price then in effect (after giving effect to the adjustment in clause 2(a) above), then on the sixteenth (16th) Trading Day immediately following such Stock Combination Event, the Exercise Price then in effect on such sixteenth (16th) Trading Day (after giving effect to the adjustment in clause 2(a) above) shall be reduced (but in no event increased) to the Event Market Price. For the avoidance of doubt, if the adjustment in the immediately preceding sentence would otherwise result in an increase in the Exercise Price hereunder, no adjustment shall be made.

(f) Other Events. In the event that the Company (or any Subsidiary (as defined in the Securities Purchase Agreement)) shall take any action to which the provisions hereof are not strictly applicable, or, if applicable, would not operate to protect the Holder from dilution or if any event occurs of the type contemplated by the provisions of this Section 2 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company’s board of directors shall in good faith determine and implement an appropriate adjustment in the Exercise Price and the number of Warrant Shares (if applicable) so as to protect the rights of the Holder, provided that no such adjustment pursuant to this Section 2(f) will increase the Exercise Price or decrease the number of Warrant Shares as otherwise determined pursuant to this Section 2, provided further that if the Holder does not accept such adjustments as appropriately protecting its interests hereunder against such dilution, then the Company’s board of directors and the Holder shall agree, in good faith, upon an independent investment bank of nationally recognized standing to make such appropriate adjustments, whose determination shall be final and binding absent manifest error and whose fees and expenses shall be borne by the Company.

(g) Calculations. All calculations under this Section 2 shall be made by rounding to the nearest cent or the nearest 1/100th of a share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issuance or sale of shares of Common Stock.

(h) Voluntary Adjustment By Company. Subject to the rules and regulations of the Principal Market, the Company may at any time during the term of this Warrant, with the prior written consent of the Required Holders (as defined in the Securities Purchase Agreement), reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the board of directors of the Company.

(i) Floor Price. No adjustment pursuant to this Section 2 shall cause the Exercise Price to be less than \$0.4506, which shall be reduced to 20% of the “Minimum Price” (as defined in Rule 5635 of the Rules of the Nasdaq Stock Market) on the Stockholder Approval Date (as defined in the Securities Purchase Agreement) if such price is lower (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the date of the Securities Purchase Agreement) (the “**Floor Price**”). Notwithstanding the foregoing, nothing contained in this Section 2(i) shall apply after Stockholder Approval (as defined in the Securities Purchase Agreement) is obtained and, on such Stockholder Approval Date, any adjustments that would have occurred hereunder prior to the Stockholder Approval Date, but for the existence of this Section 2(i), shall be applied pursuant to this Section 2 on the Stockholder Approval Date (without regard to the limitations in this Section 2(i) as if such event or Dilutive Issuance, as applicable, occurred on the Stockholder Approval Date.

3. Rights Upon Distribution of Assets. In addition to any adjustments pursuant to Section 2 above or Section 4(a) below, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “Distribution”), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder’s right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to the extent of any such excess) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. Purchase Rights; Fundamental Transactions

(a) Purchase Rights. In addition to any adjustments pursuant to Sections 2 or 3 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the “**Purchase Rights**”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issuance or sale of such Purchase Rights (provided, however, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) **Fundamental Transactions.** The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents (as defined in the Securities Purchase Agreement) in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, which is exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction) and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the consummation of each Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of the applicable Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of each Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the consummation of the applicable Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 3 and 4(a) above, which shall continue to be receivable thereafter)) issuable upon the exercise of this Warrant prior to the applicable Fundamental Transaction, such shares of publicly traded common stock (or its equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of the applicable Fundamental Transaction had this Warrant been exercised immediately prior to the applicable Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. Notwithstanding the foregoing, and without limiting Section 1(f) hereof, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 4(b) to permit the Fundamental Transaction without the assumption of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the consummation of each Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a "Corporate Event"), the Company shall make appropriate provision to insure that the Holder will thereafter have the right to receive upon an exercise of this Warrant at any time after the consummation of the applicable Fundamental Transaction but prior to the Expiration Date, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 3 and 4(a) above, which shall continue to be receivable thereafter)) issuable upon the exercise of the Warrant prior to such Fundamental Transaction, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights) which the Holder would have been entitled to receive upon the happening of the applicable Fundamental Transaction had this Warrant been exercised immediately prior to the applicable Fundamental Transaction (without regard to any limitations on the exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder.

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(c) **Black Scholes Value.** Notwithstanding the foregoing and the provisions of Section 4(b) above, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Warrant. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction.

(d) **Application.** The provisions of this Section 4 shall apply similarly and equally to successive Fundamental Transactions and Corporate Events and shall be applied as if this Warrant (and any such subsequent warrants) were fully exercisable and without regard to any limitations on the exercise of this Warrant (provided that the Holder shall continue to be entitled to the benefit of the Maximum Percentage, applied however with respect to shares of capital stock registered under the 1934 Act and thereafter receivable upon exercise of this Warrant (or any such other warrant)).

5. Noncircumvention. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation (as defined in the Securities Purchase Agreement), Bylaws (as defined in the Securities Purchase Agreement) or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issuance or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (a) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, and (b) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable shares of Common Stock upon the exercise of this Warrant. Notwithstanding anything herein to the contrary, if after the sixty (60) calendar day anniversary of the Issuance Date, the Holder is not permitted to exercise this Warrant in full for any reason (other than pursuant to restrictions set forth in Section 1(f) hereof), the Company shall use its best efforts to promptly remedy such failure, including, without limitation, obtaining such consents or approvals as necessary to permit such exercise into shares of Common Stock.

6. Warrant Holder Not Deemed a Stockholder. Except as otherwise specifically provided herein, the Holder, solely in its capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of capital stock of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in its capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which it is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders; provided that the Company shall have no such obligation to the extent such information is filed with the SEC through EDGAR and are available to the public through the EDGAR system.

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7. Reissuance of Warrants.

(a) **Transfer of Warrant.** If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) **Lost, Stolen or Mutilated Warrant.** Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant (as to which a written certification and the indemnification contemplated below shall suffice as such evidence), and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary and reasonable form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) **Exchangeable for Multiple Warrants.** This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, no warrants for fractional shares of Common Stock shall be given.

(d) **Issuance of New Warrants.** Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

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

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

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8. Notices.

Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant (other than the issuance of shares of Common Stock upon exercise in accordance with the terms hereof), including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon each adjustment of the Exercise Price and the number of Warrant Shares, setting forth in reasonable detail, and certifying, the calculation of such adjustment(s), (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder, and (iii) at least ten (10) Trading Days prior to the consummation of any Fundamental Transaction. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of its Subsidiaries, the Company shall simultaneously file such notice with the SEC (as defined in the Securities Purchase Agreement) pursuant to a Current Report on Form 8-K. If the Company or any of its Subsidiaries provides material non-public information to the Holder that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. It is expressly understood and agreed that the time of execution specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. Disclosure. Upon delivery by the Company to the Holder (or receipt by the Company from the Holder) of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall on or prior to 9:00 am, New York City time on the Business Day immediately following such notice delivery date, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its Subsidiaries, the Company so shall indicate to the Holder explicitly in writing in such notice (or immediately upon receipt of notice from the Holder, as applicable), and in the absence of any such written indication in such notice (or notification from the Company immediately upon receipt of notice from the Holder), the Holder shall be entitled to presume that information contained in the notice does not constitute material, non-public information relating to the Company or any of its Subsidiaries. Nothing contained in this Section 9 shall limit any obligations of the Company, or any rights of the Holder, under Section 4(i) of the Securities Purchase Agreement.

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10. Absence of Trading and Disclosure Restrictions. The Company acknowledges and agrees that the Holder is not a fiduciary or agent of the Company and that the Holder shall have no obligation to (a) maintain the confidentiality of any information provided by the Company or (b) refrain from trading any securities while in possession of such information in the absence of a written non-disclosure agreement signed by an officer of the Holder that explicitly provides for such confidentiality and trading restrictions. In the absence of such an executed, written non-disclosure agreement, the Company acknowledges that the Holder may freely trade in any securities issued by the Company, may possess and use any information provided by the Company in connection with such trading activity, and may disclose any such information to any third party.

11. Amendment and Waiver. Except as otherwise provided herein, the provisions of this Warrant (other than Section 1(f)) may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party.

12. Severability. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Governing Law. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at the address set forth in Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or

other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

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14. Construction; Headings. This Warrant shall be deemed to be jointly drafted by the Company and the Holder and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant. Terms used in this Warrant but defined in the other Transaction Documents shall have the meanings ascribed to such terms on the Closing Date (as defined in the Securities Purchase Agreement) in such other Transaction Documents unless otherwise consented to in writing by the Holder.

15. Dispute Resolution.

(a) Submission to Dispute Resolution.

(i) In the case of a dispute relating to the Exercise Price, the Closing Sale Price, the Bid Price, Black Scholes Consideration Value, Black Scholes Value or fair market value or the arithmetic calculation of the number of Warrant Shares (as the case may be) (including, without limitation, a dispute relating to the determination of any of the foregoing), the Company or the Holder (as the case may be) shall submit the dispute to the other party via facsimile (A) if by the Company, within two (2) Business Days after the occurrence of the circumstances giving rise to such dispute or (B) if by the Holder, at any time after the Holder learned of the circumstances giving rise to such dispute. If the Holder and the Company are unable to promptly resolve such dispute relating to such Exercise Price, such Closing Sale Price, such Bid Price, such Black Scholes Consideration Value, Black Scholes Value or such fair market value or such arithmetic calculation of the number of Warrant Shares (as the case may be), at any time after the second (2nd) Business Day following such initial notice by the Company or the Holder (as the case may be) of such dispute to the Company or the Holder (as the case may be), then the Holder may, at its sole option, select an independent, reputable investment bank to resolve such dispute.

(ii) The Holder and the Company shall each deliver to such investment bank (A) a copy of the initial dispute submission so delivered in accordance with the first sentence of this Section 15 and (B) written documentation supporting its position with respect to such dispute, in each case, no later than 5:00 p.m. (New York time) by the fifth (5th) Business Day immediately following the date on which the Holder selected such investment bank (the “**Dispute Submission Deadline**”) (the documents referred to in the immediately preceding clauses (A) and (B) are collectively referred to herein as the “**Required Dispute Documentation**”) (it being understood and agreed that if either the Holder or the Company fails to so deliver all of the Required Dispute Documentation by the Dispute Submission Deadline, then the party who fails to so submit all of the Required Dispute Documentation shall no longer be entitled to (and hereby waives its right to) deliver or submit any written documentation or other support to such investment bank with respect to such dispute and such investment bank shall resolve such dispute based solely on the Required Dispute Documentation that was delivered to such investment bank prior to the Dispute Submission Deadline). Unless otherwise agreed to in writing by both the Company and the Holder or otherwise requested by such investment bank, neither the Company nor the Holder shall be entitled to deliver or submit any written documentation or other support to such investment bank in connection with such dispute (other than the Required Dispute Documentation).

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(iii) The Company and the Holder shall cause such investment bank to determine the resolution of such dispute and notify the Company and the Holder of such resolution no later than ten (10) Business Days immediately following the Dispute Submission Deadline. The fees and expenses of such investment bank shall be borne solely by the Company, and such investment bank’s resolution of such dispute shall be final and binding upon all parties absent manifest error.

(b) Miscellaneous. The Company expressly acknowledges and agrees that (i) this Section 15 constitutes an agreement to arbitrate between the Company and the Holder (and constitutes an arbitration agreement) under the rules then in effect under § 7501, et seq. of the New York Civil Practice Law and Rules (“**CPLR**”) and that the Holder is authorized to apply for an order to compel arbitration pursuant to CPLR § 7503(a) in order to compel compliance with this Section 15, (ii) the terms of this Warrant and each other applicable Transaction Document shall serve as the basis for the selected investment bank’s resolution of the applicable dispute, such investment bank shall be entitled (and is hereby expressly authorized) to make all findings, determinations and the like that such investment bank determines are required to be made by such investment bank in connection with its resolution of such dispute, (iii) the Holder (and only the Holder), in its sole discretion, shall have the right to submit any dispute described in this Section 15 to any state or federal court sitting in The City of New York, Borough of Manhattan in lieu of utilizing the procedures set forth in this Section 15 and (iv) nothing in this Section 15 shall limit the Holder from obtaining any injunctive relief or other equitable remedies (including, without limitation, with respect to any matters described in this Section 15).

16. Remedies, Characterization, Other Obligations, Breaches and Injunctive Relief The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual and consequential damages for any failure by the Company to comply with the terms of this Warrant. The Company covenants to the Holder that there shall be no characterization concerning this instrument other than as expressly provided herein. Amounts set forth or provided for herein with respect to payments, exercises and the like (and the computation thereof) shall be the amounts to be received by the Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to specific performance and/or temporary, preliminary and permanent injunctive or other equitable relief from any court of competent jurisdiction in any such case without the necessity of proving actual damages and without posting a bond or other security. The Company shall provide all information and documentation to the Holder that is requested by the Holder to enable the Holder to confirm the Company’s compliance with the terms and conditions of this Warrant (including, without limitation, compliance with Section 2 hereof). The issuance of shares and certificates for shares as contemplated hereby upon the exercise of this Warrant shall be made without charge to the Holder or such shares for any issuance tax or other costs in respect thereof, provided that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than the Holder or its agent on its behalf.

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17. Payment of Collection, Enforcement and Other Costs. If (a) this Warrant is placed in the hands of an attorney for collection or enforcement or is collected or enforced through any legal proceeding or the holder otherwise takes action to collect amounts due under this Warrant or to enforce the provisions of this Warrant or (b) there occurs any bankruptcy, reorganization, receivership of the company or other proceedings affecting company creditors’ rights and involving a claim under this Warrant, then the Company shall pay the costs incurred by the Holder for such collection, enforcement or action or in connection with such bankruptcy, reorganization, receivership or other proceeding, including, without limitation, attorneys’ fees and disbursements.

18. Transfer. This Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company, except as may otherwise be required by Section 2(g) of the Securities Purchase Agreement and applicable securities laws.

19. Certain Definitions. For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**1933 Act**” means the Securities Act of 1933, as amended, and the rules and regulations thereunder.

(b) “1934 Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

(c) “Adjustment Right” means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale in accordance with Section 2) of Common Stock (other than rights of the type described in Section 4 hereof) that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(d) “Affiliate” means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that “control” of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(e) “Attribution Parties” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

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(f) “Bid Price” means, for any security as of the particular time of determination, the bid price for such security on the Principal Market as reported by Bloomberg as of such time of determination, or, if the Principal Market is not the principal securities exchange or trading market for such security, the bid price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg as of such time of determination, or if the foregoing does not apply, the bid price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg as of such time of determination, or, if no bid price is reported for such security by Bloomberg as of such time of determination, the average of the bid prices of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices) as of such time of determination. If the Bid Price cannot be calculated for a security as of the particular time of determination on any of the foregoing bases, the Bid Price of such security as of such time of determination shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(g) “Black Scholes Consideration Value” means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 60 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

(h) “Black Scholes Value” means the value of the unexercised portion of this Warrant remaining on the date of the Holder’s request pursuant to Section 4(c)(i), which value is calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the greater of (1) the highest Closing Sale Price of the Common Stock during the period beginning on the Trading Day immediately preceding the announcement of the applicable Fundamental Transaction (or the consummation of the applicable Fundamental Transaction, if earlier) and ending on the Trading Day of the Holder’s request pursuant to Section 4(c)(i) and (2) the sum of the price per share being offered in cash in the applicable Fundamental Transaction (if any) plus the value of the non-cash consideration being offered in the applicable Fundamental Transaction (if any), (ii) a strike price equal to the Exercise Price in effect on the date of the Holder’s request pursuant to Section 4(c)(i), (iii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the greater of (1) the remaining term of this Warrant as of the date of the Holder’s request pursuant to Section 4(c)(i) and (2) the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction or as of the date of the Holder’s request pursuant to Section 4(c)(i) if such request is prior to the date of the consummation of the applicable Fundamental Transaction, (iv) a zero cost of borrow and (v) an expected volatility equal to the greater of 100% and the 60 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the earliest to occur of (A) the public disclosure of the applicable Fundamental Transaction and (B) the date of the Holder’s request pursuant to Section 4(c)(i).

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(i) “Bloomberg” means Bloomberg, L.P.

(j) “Business Day” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(k) “Closing Sale Price” means, for any security as of any date, the last closing trade price for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing trade price, then the last trade price of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last trade price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing does not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no last trade price is reported for such security by Bloomberg, the average of the ask prices of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(l) “Common Stock” means (i) the Company’s shares of common stock, \$0.0001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any capital stock resulting from a reclassification of such common stock.

(m) “Convertible Securities” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any Common Stock.

(n) “Eligible Market” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or the Principal Market.

(o) “**Event Market Price**” means, with respect to any Stock Combination Event Date, the quotient determined by dividing (x) the sum of the VWAP of the Common Stock for each of the five (5) lowest Trading Days during the twenty (20) consecutive Trading Day period ending and including the Trading Day immediately preceding the sixteenth (16th) Trading Day after such Stock Combination Event Date, divided by (y) five (5). All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

(p) “**Expiration Date**” means the date that is the eighteen (18) month anniversary of the Issuance Date or, if such date falls on a day other than a Trading Day or on which trading does not take place on the Principal Market (a “**Holiday**”), the next date that is not a Holiday.

(q) “**Fundamental Transaction**” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock not held by all such Subject Entities as of the date of this Warrant calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(r) “**Group**” means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(s) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(t) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(u) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity or a government or any department or agency thereof.

(v) “**Principal Market**” means the Nasdaq Capital Market.

(w) “**Registration Rights Agreement**” means that certain registration rights agreement, dated as of the Closing Date, by and among the Company and the Buyers of the Preferred Shares and SPA Warrants relating to, among other things, the registration of the resale of the shares of Common Stock issuable upon conversion of the Preferred Shares or otherwise pursuant to the terms of the Certificate of Designations and exercise of the SPA Warrants, as may be amended from time to time.

(x) “**SEC**” means the United States Securities and Exchange Commission or the successor thereto.

(y) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(z) “**Successor Entity**” means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(aa) “**Trading Day**” means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price or trading volume determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(bb) “**VWAP**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded), during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg through its “VAP” function (set to 09:30 start time and 16:00 end time) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted

average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

[Signature page follows.]

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IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

COMPANY:

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

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Exhibit A

**EXERCISE NOTICE
TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK
MYMD PHARMACEUTICALS, INC.**

The undersigned holder hereby elects to exercise the Warrant to Purchase Common Stock No. _____ (the "**Warrant**") of MYMD PHARMACEUTICALS, INC., a Delaware corporation (the "**Company**"), as specified below. Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. **Form of Exercise Price.** The Holder intends that payment of the Aggregate Exercise Price shall be made as:

- a "**Cash Exercise**" with respect to _____ Warrant Shares; and/or
 a "**Cashless Exercise**" with respect to _____ Warrant Shares.

In the event that the Holder has elected a Cashless Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the Holder hereby represents and warrants that (i) this Exercise Notice was executed by the Holder at _____ [a.m.][p.m.] on the date set forth below and (ii) if applicable, the Bid Price as of such time of execution of this Exercise Notice was \$_____.

2. **Payment of Exercise Price.** In the event that the Holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the Holder shall pay the Aggregate Exercise Price in the sum of \$_____ to the Company in accordance with the terms of the Warrant.

3. **Delivery of Warrant Shares.** The Company shall deliver to Holder, or its designee or agent as specified below, _____ shares of Common Stock in accordance with the terms of the Warrant. Delivery shall be made to Holder, or for its benefit, as follows:

Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: _____

Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant:: _____
DTC Number: _____
Account Number: _____

Date: _____,

Name of Registered Holder

By: _____
Name: _____
Title: _____

Tax ID: _____

Facsimile: _____

E-mail Address: _____

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs _____ to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated _____, 202_, from the Company and acknowledged and agreed to by _____.

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

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 TO THE HOLDER (IF REQUESTED BY THE COMPANY), IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD OR ELIGIBLE TO BE 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.

Form of Warrant

MYMD PHARMACEUTICALS, INC.

Warrant To Purchase Common Stock

Date of Issuance: [●], 2024 (“**Issuance Date**”)

MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, _____, the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, upon exercise of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the “**Warrant**”), at any time or times on or after the Issuance Date, but not after 11:59 p.m., New York time, on the Expiration Date (as defined below), _____ (subject to adjustment as provided herein) fully paid and non-assessable shares of Common Stock (as defined below) (the “**Warrant Shares**”, and such number of Warrant Shares, the “**Warrant Number**”). Except as otherwise defined herein, capitalized terms in this Warrant shall have the meanings set forth in Section 19 or in the Securities Purchase Agreement (as defined below). This Warrant is one of the Warrants to Purchase Common Stock (the “**SPA Warrants**”) issued pursuant to Section 1 of that certain Securities Purchase Agreement, dated as of May 20, 2024 (the “**Subscription Date**”), by and among the Company and the investors (the “**Buyers**”) referred to therein, as amended from time to time (the “**Securities Purchase Agreement**”).

1. Exercise of Warrant.

(a) **Mechanics of Exercise.** Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder on any day on or after the Issuance Date (an “**Exercise Date**”), in whole or in part, by delivery (whether via electronic mail or otherwise) of a written notice, in the form attached hereto as **Exhibit A** (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant. Within one (1) Trading Day following an exercise of this Warrant as aforesaid, the Holder shall deliver payment to the Company of an amount equal to the Exercise Price in effect on the date of such exercise multiplied by the number of Warrant Shares as to which this Warrant was so exercised (the “**Aggregate Exercise Price**”) in cash or via wire transfer of immediately available funds if the Holder did not notify the Company in such Exercise Notice that such exercise was made pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original of this Warrant in order to effect an exercise hereunder. Execution and delivery of an Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original of this Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. Execution and delivery of an Exercise Notice for all of the then-remaining Warrant Shares shall have the same effect as cancellation of the original of this Warrant after delivery of the Warrant Shares in accordance with the terms hereof. On or before the first (1st) Trading Day following the date on which the Company has received an Exercise Notice, the Company shall transmit by electronic mail an acknowledgment of confirmation of receipt of such Exercise Notice, in the form attached hereto as **Exhibit B**, to the Holder and the Company’s transfer agent (the “**Transfer Agent**”), which confirmation shall constitute an instruction to the Transfer Agent to process such Exercise Notice in accordance with the terms herein. On or before the first (1st) Trading Day following the date on which the Company has received such Exercise Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade of such Warrant Shares initiated on the applicable Exercise Date), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program (“**FAST**”) and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal at Custodian system, or (Y) if the Transfer Agent is not participating in the DTC FAST, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Exercise Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such exercise. Upon delivery of an Exercise Notice, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the certificates evidencing such Warrant Shares (as the case may be). If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise and upon surrender of this Warrant to the Company by the Holder, then, at the request of the Holder, the Company shall as soon as practicable and in no event later than two (2) Business Days after any exercise and at its own expense, issue and deliver to the Holder (or its designee) a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional shares of Common Stock are to be issued upon the exercise of this Warrant, but rather the number of shares of Common Stock to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Transfer Agent) that may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. Notwithstanding the foregoing, except in the case where an exercise of this Warrant is validly made pursuant to a Cashless Exercise, the Company’s failure to deliver Warrant Shares to the Holder on or prior to the later of (i) two (2) Trading Days after receipt of the applicable Exercise Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade of such Warrant Shares initiated on the applicable Exercise Date) and (ii) one (1) Trading Day after the Company’s receipt of the Aggregate Exercise Price (or valid notice of a Cashless Exercise if permissible) (such later date, the “**Share Delivery Date**”) shall not be deemed to be a breach of this Warrant. Notwithstanding anything to the contrary contained in this Warrant or the Registration Rights Agreement, after the effective date of the Registration Statement (as defined in the Registration Rights Agreement) and prior to the Holder’s receipt of the notice of a Grace Period (as defined in the Registration Rights Agreement), the Company shall cause the Transfer Agent to deliver unlegended shares of Common Stock to the Holder (or its designee) in connection with any sale of Registrable Securities (as defined in the Registration Rights Agreement) with respect to which the Holder has entered into a contract for sale, and delivered a copy of the prospectus included as part of the particular Registration Statement to the extent applicable, and for which the Holder has not yet settled. From the Issuance Date through and including the Expiration Date, the Company shall maintain a transfer agent that participates in FAST.

(b) **Exercise Price.** For purposes of this Warrant, “**Exercise Price**” means \$1.816, subject to adjustment as provided herein.

(c) **Company’s Failure to Timely Deliver Securities.** If the Company shall fail, for any reason or for no reason, on or prior to the Share Delivery Date, either (I) if the Transfer Agent is not participating in FAST, to issue and deliver to the Holder (or its designee) a certificate for the number of Warrant Shares to which the Holder is entitled and register such Warrant Shares on the Company’s share register or, if the Transfer Agent is participating in FAST and such Warrant Shares are eligible to be resold pursuant to

Rule 144 or an effective registration statement, to credit the balance account of the Holder or the Holder's designee with DTC for such number of Warrant Shares to which the Holder is entitled upon the Holder's exercise of this Warrant (as the case may be) or (II) if a Registration Statement covering the resale of the Warrant Shares that are the subject of the Exercise Notice (the "**Unavailable Warrant Shares**") is not available for the resale of such Unavailable Warrant Shares and the Company fails to promptly (x) so notify the Holder and (y) deliver the Warrant Shares electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit/Withdrawal At Custodian system (the event described in the immediately foregoing clause (II) is hereinafter referred to as a "**Notice Failure**" and together with the event described in clause (I) above, a "**Delivery Failure**"), then, in addition to all other remedies available to the Holder, (X) the Company shall pay in cash to the Holder on each day after the Share Delivery Date and during such Delivery Failure an amount equal to 2% of the product of (A) the sum of the number of shares of Common Stock not issued to the Holder on or prior to the Share Delivery Date and to which the Holder is entitled, multiplied by (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable Exercise Date and ending on the applicable Share Delivery Date, and (Y) the Holder, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the voiding of an Exercise Notice shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date either (I) the Transfer Agent is not participating in the DTC FAST, the Company shall fail to issue and deliver to the Holder (or its designee) a certificate and register such shares of Common Stock on the Company's share register or, if the Transfer Agent is participating in the DTC FAST and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, the Transfer Agent shall fail to credit the balance account of the Holder or the Holder's designee with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below or (II) a Notice Failure occurs, and if on or after such Share Delivery Date the Holder acquires (in an open market transaction, stock loan or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such exercise that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Delivery Failure or Notice Failure, as applicable (a "**Buy-In**"), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions, stock loan costs and other out-of-pocket expenses, if any) for the shares of Common Stock so acquired (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the "**Buy-In Price**"), at which point the Company's obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder's exercise hereunder (as the case may be) (and to issue such Warrant Shares) shall terminate, or (ii) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such Warrant Shares or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder's exercise hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of Warrant Shares multiplied by (B) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Exercise Notice and ending on the date of such issuance and payment under this clause (ii) (the "**Buy-In Payment Amount**"). Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of this Warrant as required pursuant to the terms hereof. While this Warrant is outstanding, the Company shall cause its transfer agent to participate in FAST. In addition to the foregoing rights, (i) if the Company fails to deliver the applicable number of Warrant Shares upon an exercise pursuant to Section 1 by the applicable Share Delivery Date, then the Holder shall have the right to rescind such exercise in whole or in part and retain and/or have the Company return, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the rescission of an exercise shall not affect the Company's obligation to make any payments that have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise, and (ii) if a registration statement (which may be the Registration Statement) covering the issuance or resale of the Warrant Shares that are subject to an Exercise Notice is not available for the issuance or resale, as applicable, of such Warrant Shares and the Holder has submitted an Exercise Notice prior to receiving notice of the non-availability of such registration statement and the Company has not already delivered the Warrant Shares underlying such Exercise Notice electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, the Holder shall have the option, by delivery of notice to the Company, to (x) rescind such Exercise Notice in whole or in part and retain or have returned, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the rescission of an Exercise Notice shall not affect the Company's obligation to make any payments that have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise, and/or (y) switch some or all of such Exercise Notice from a cash exercise to a Cashless Exercise.

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(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary (other than Section 1(f) below), if at the time of exercise hereof a Registration Statement (as defined in the Registration Rights Agreement) is not effective (or the prospectus contained therein is not available for use) for the resale by the Holder of all of the Warrant Shares, then the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the "Net Number" of Warrant Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

- A = the total number of shares with respect to which this Warrant is then being exercised.
- B = as elected by the Holder: (i) the VWAP of the Common Stock on the Trading Day immediately preceding the date of the applicable Exercise Notice if such Exercise Notice is (1) both executed and delivered pursuant to Section 1(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 1(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b)(64) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Exercise Notice or (z) the Bid Price of the Common Stock as of the time of the Holder's execution of the applicable Exercise Notice if such Exercise Notice is executed during "regular trading hours" on a Trading Day and is delivered within two (2) hours thereafter pursuant to Section 1(a) hereof, or (iii) the Closing Sale Price of the Common Stock on the date of the applicable Exercise Notice if the date of such Exercise Notice is a Trading Day and such Exercise Notice is both executed and delivered pursuant to Section 1(a) hereof after the close of "regular trading hours" on such Trading Day.
- C = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

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If the Warrant Shares are issued in a Cashless Exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, the Warrant Shares take on the registered characteristics of the Warrants being exercised. For purposes of Rule 144(d) promulgated under the 1933 Act, as in effect on the Subscription Date, it is intended that the Warrant Shares issued in a Cashless Exercise shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Securities Purchase Agreement.

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the number of Warrant Shares to be issued pursuant to the terms hereof, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 15.

(f) Limitations on Exercises.

(i) **Beneficial Ownership.** The Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the “**Maximum Percentage**”) of the Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including other SPA Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f)(i). For purposes of this Section 1(f)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the 1934 Act. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the “**Reported Outstanding Share Number**”). If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 1(f)(i), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be acquired pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “**Reduction Shares**”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of SPA Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f)(i) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f)(i) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

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(ii) **Principal Market Regulation.** The Company shall not issue any shares of Common Stock upon the exercise of this Warrant if the issuance of such shares of Common Stock (taken together with the issuance of such shares upon the conversion of the Preferred Shares (as defined in the Securities Purchase Agreement) or otherwise pursuant to the terms of the Certificate of Designations (as defined in the Securities Purchase Agreement)) would exceed the aggregate number of shares of Common Stock which the Company may issue upon exercise or conversion or otherwise pursuant to the terms of the Certificate of Designations and the SPA Warrants without breaching the Company’s obligations under the rules or regulations of the Principal Market (the number of shares which may be issued without violating such rules and regulations, the “**Exchange Cap**”), except that such limitation shall not apply in the event that the Company (A) obtains the approval of its stockholders as required by the applicable rules of the Principal Market for issuances of shares of Common Stock in excess of such amount or (B) obtains a written opinion from outside counsel to the Company that such approval is not required, which opinion shall be reasonably satisfactory to the Holder. Until such approval or such written opinion is obtained, no Buyer shall be issued in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any of the SPA Warrants or otherwise pursuant to the terms of the Certificate of Designations or the SPA Warrants, shares of Common Stock in an amount greater than the product of (i) the Exchange Cap as of the Issuance Date multiplied by (ii) the quotient of (1) the aggregate number of Preferred Shares issued to such Buyer pursuant to the Securities Purchase Agreement on the Closing Date (as defined in the Securities Purchase Agreement) divided by (2) the aggregate stated value of all Preferred Shares issued to the Buyers pursuant to the Securities Purchase Agreement on the Closing Date (with respect to each Buyer, the “**Exchange Cap Allocation**”). In the event that any Buyer shall sell or otherwise transfer any of such Buyer’s SPA Warrants, the transferee shall be allocated a pro rata portion of such Buyer’s Exchange Cap Allocation with respect to such portion of such SPA Warrants so transferred, and the restrictions of the prior sentence shall apply to such transferee with respect to the portion of the Exchange Cap Allocation so allocated to such transferee. Upon conversion and exercise in full of a holder’s Preferred Shares and SPA Warrants, the difference (if any) between such holder’s Exchange Cap Allocation and the number of shares of Common Stock actually issued to such holder upon such holder’s conversion in full of such Preferred Shares and such holder’s exercise in full of such SPA Warrants shall be allocated, to the respective Exchange Cap Allocations of the remaining holders of Preferred Shares and related SPA Warrants on a pro rata basis in proportion to the shares of Common Stock underlying the Preferred Shares and related SPA Warrants then held by each such holder of Preferred Shares and related SPA Warrants. In the event that after December 1, 2024, the Company is then prohibited from issuing any shares of Common Stock pursuant to this Section 1(f)(ii) (the “**Exchange Cap Shares**”), in lieu of issuing and delivering such Exchange Cap Shares to the Holder, the Company shall pay cash to the Holder in exchange for the cancellation of such portion of this Warrant exercisable into such Exchange Cap Shares (the “**Exchange Cap Payment Amount**”) at a price equal to the sum of (x) the product of (A) such number of Exchange Cap Shares and (B) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date the Holder delivers the applicable Exercise Notice with respect to such Exchange Cap Shares to the Company and ending on the date of such payment under this Section 1(f)(ii) and (y) to the extent the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of Exchange Cap Shares, any brokerage commissions and other out-of-pocket expenses, if any, of the Holder incurred in connection therewith.

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(g) **Reservation of Shares.**

(i) **Required Reserve Amount.** So long as this Warrant remains outstanding, following the Stockholder Approval Date, the Company shall at all times keep reserved for issuance under this Warrant a number of shares of Common Stock at least equal to 200% of the maximum number of shares of Common Stock as shall be necessary to satisfy the Company’s obligation to issue shares of Common Stock under the SPA Warrants then outstanding (without regard to any limitations on exercise) (the “**Required Reserve Amount**”); provided that at no time shall the number of shares of Common Stock reserved pursuant to this Section 1(g)(i) be reduced other than proportionally in connection with any exercise or redemption of SPA Warrants or such other event covered by Section 2(a) below. The Required Reserve Amount (including, without limitation, each increase in the number of shares so reserved) shall be allocated pro rata among the holders of the SPA Warrants based on the number of shares of Common Stock issuable upon exercise of SPA Warrants held by each holder on the Closing Date (as defined in the Securities Purchase Agreement) (without regard to any

limitations on exercise) or increase in the number of reserved shares, as the case may be (the “**Authorized Share Allocation**”). In the event that a holder shall sell or otherwise transfer any of such holder’s SPA Warrants, each transferee shall be allocated a pro rata portion of such holder’s Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any SPA Warrants shall be allocated to the remaining holders of SPA Warrants, pro rata based on the number of shares of Common Stock issuable upon exercise of the SPA Warrants then held by such holders (without regard to any limitations on exercise).

(ii) **Insufficient Authorized Shares.** If, notwithstanding Section 1(g)(i) above, and not in limitation thereof, following the Stockholder Approval Date, at any time while any of the SPA Warrants remain outstanding, the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve the Required Reserve Amount (an “**Authorized Share Failure**”), then the Company shall use its best efforts to take all action necessary to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for all the SPA Warrants then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders’ approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if at any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding shares of Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C. In the event that the Company is prohibited from issuing shares of Common Stock upon an exercise of this Warrant due to the failure by the Company to have sufficient shares of Common Stock available out of the authorized but unissued shares of Common Stock (such unavailability number of shares of Common Stock, the “**Authorization Failure Shares**”), in lieu of delivering such Authorization Failure Shares to the Holder, the Company shall pay cash in exchange for the cancellation of such portion of this Warrant exercisable into such Authorization Failure Shares at a price equal to the sum of (i) the product of (x) such number of Authorization Failure Shares and (y) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date the Holder delivers the applicable Exercise Notice with respect to such Authorization Failure Shares to the Company and ending on the date of such issuance and payment under this Section 1(g); and (ii) to the extent the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of Authorization Failure Shares, any Buy-In Payment Amount, brokerage commissions and other out-of-pocket expenses, if any, of the Holder incurred in connection therewith. Nothing contained in this Section 1(g) shall limit any obligations of the Company under any provision of the Securities Purchase Agreement.

2. Adjustment of Exercise Price and Number of Warrant Shares.

The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 2.

(a) **Stock Dividends and Splits.** Without limiting any provision of Section 2(b), Section 3 or Section 4, if the Company, at any time on or after the Subscription Date, (i) pays a stock dividend on one or more classes of its then outstanding shares of Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, other than Excluded Securities (as defined in the Securities Purchase Agreement), (ii) subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its then outstanding shares of Common Stock into a larger number of shares or (iii) combines (by combination, reverse stock split or otherwise) one or more classes of its then outstanding shares of Common Stock into a smaller number of shares then in each such case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this paragraph occurs during the period that an Exercise Price is calculated hereunder, then the calculation of such Exercise Price shall be adjusted appropriately to reflect such event.

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(b) **Adjustment Upon Issuance of Shares of Common Stock.** If and whenever on or after the Subscription Date, the Company grants, issues or sells (or enters into any agreement or publicly announces its intention to grant, issue or sell), or in accordance with this Section 2 is deemed to have granted, issued or sold, any shares of Common Stock (including the issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding any Excluded Securities granted issued or sold or deemed to have been granted issued or sold) for a consideration per share (the “**New Issuance Price**”) less than a price equal to the Exercise Price in effect immediately prior to such granting, issuance or sale or deemed granting, issuance or sale (such Exercise Price then in effect is referred to herein as the “**Applicable Price**”) (the foregoing a “**Dilutive Issuance**”), then immediately after such Dilutive Issuance, the Exercise Price then in effect shall be reduced to an amount equal to the New Issuance Price. Simultaneously with any decrease in the Exercise Price pursuant to Section 2(b), the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein). For all purposes of the foregoing (including, without limitation, determining the adjusted Exercise Price and the New Issuance Price under this Section 2(b)), the following shall be applicable:

(i) **Issuance of Options.** If the Company in any manner grants, issues or sells (or enters into any agreement to grant, issue or sell) any Options and the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting, issuance or sale (or the time of execution of such agreement to grant, issue or sell, as applicable) of such Option for such price per share. For purposes of this Section 2(b)(i), the “lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting, issuance or sale (or pursuant to the agreement to grant, issue or sell, as applicable) of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such Option for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Option (or any other Person) upon the granting, issuance or sale (or the agreement to grant, issue or sell, as applicable) of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Option (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock or of such Convertible Securities upon the exercise of such Options or otherwise pursuant to the terms of or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

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(ii) **Issuance of Convertible Securities.** If the Company in any manner issues or sells (or enters into any agreement to issue or sell) any Convertible Securities and the lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale (or the time of execution of such agreement to issue or sell, as applicable) of such Convertible Securities for such price per share. For the purposes of this Section 2(b)(ii), the “lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to one share of Common Stock upon the issuance or sale (or pursuant to the agreement to issue or sell, as applicable) of the Convertible Security and upon conversion, exercise

or exchange of such Convertible Security or otherwise pursuant to the terms thereof and (y) the lowest conversion price set forth in such Convertible Security for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Convertible Security (or any other Person) upon the issuance or sale (or the agreement to issue or sell, as applicable) of such Convertible Security plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Convertible Security (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities or otherwise pursuant to the terms thereof, and if any such issuance or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of this Warrant has been or is to be made pursuant to other provisions of this Section 2(b), except as contemplated below, no further adjustment of the Exercise Price shall be made by reason of such issuance or sale.

(iii) Change in Option Price or Rate of Conversion. If the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares of Common Stock increases or decreases at any time (other than proportional changes in conversion or exercise prices, as applicable, in connection with an event referred to in Section 2(a)), the Exercise Price in effect at the time of such increase or decrease shall be adjusted to the Exercise Price which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 2(b)(iii), if the terms of any Option or Convertible Security (including, without limitation, any Option or Convertible Security that was outstanding as of the Subscription Date) are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 2(b) shall be made if such adjustment would result in an increase of the Exercise Price then in effect.

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(iv) Calculation of Consideration Received. If any Option and/or Convertible Security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company (as determined by the Holder, the “**Primary Security**”, and such Option and/or Convertible Security and/or Adjustment Right, the “**Secondary Securities**” and together with the Primary Security, each a “**Unit**”), together comprising one integrated transaction, the aggregate consideration per share of Common Stock with respect to such Primary Security shall be deemed to be the lower of (x) the purchase price of such Unit, (y) if such Primary Security is an Option and/or Convertible Security, the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise or conversion of the Primary Security in accordance with Sections 2(b)(i) or 2(b)(ii) above and (z) the lowest VWAP of the shares of Common Stock on any Trading Day during the five (5) Trading Day period (the “**Adjustment Period**”) immediately following the public announcement of such Dilutive Issuance (for the avoidance of doubt, if such public announcement is released prior to the opening of the Principal Market on a Trading Day, such Trading Day shall be the first Trading Day in such five Trading Day period and if this Warrant is exercised, on any given Exercise Date during any such Adjustment Period, solely with respect to such portion of this Warrant exercised on such applicable Exercise Date, such applicable Adjustment Period shall be deemed to have ended on, and included, the Trading Day immediately prior to such Exercise Date). If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount of consideration received by the Company therefor. If any shares of Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company for such securities will be the arithmetic average of the VWAPs of such security for each of the five (5) Trading Days immediately preceding the date of receipt. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities (as the case may be). The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Holder. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five (5) Trading Days after the tenth (10th) day following such Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Holder. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) Record Date. If the Company takes a record of the holders of shares of Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase shares of Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issuance or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase (as the case may be).

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(c) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to this Section 2, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein).

(d) Holder’s Right of Alternative Exercise Price Following Issuance of Certain Options or Convertible Securities. In addition to and not in limitation of the other provisions of this Section 2, if the Company in any manner issues or sells or enters into any agreement to issue or sell, any Common Stock, Options or Convertible Securities (any such securities, “**Variable Price Securities**”) after the Subscription Date that are issuable pursuant to such agreement or convertible into or exchangeable or exercisable for shares of Common Stock at a price which varies or may vary with the market price of the shares of Common Stock, including by way of one or more reset(s) to a fixed price, but exclusive of such formulations reflecting customary anti-dilution provisions (such as share splits, share combinations, share dividends and similar transactions) (each of the formulations for such variable price being herein referred to as, the “**Variable Price**”), the Company shall provide written notice thereof via electronic mail and overnight courier to the Holder on the date of such agreement and the issuance of such Convertible Securities or Options. From and after the date the Company enters into such agreement or issues any such Variable Price Securities, the Holder shall have the right, but not the obligation, in its sole discretion to substitute the Variable Price for the Exercise Price upon exercise of this Warrant by designating in the Exercise Notice delivered upon any exercise of this Warrant that solely for purposes of such exercise the Holder is relying on the Variable Price rather than the Exercise Price then in effect. The Holder’s election to rely on a Variable Price for a particular exercise of this Warrant shall not obligate the Holder to rely on a Variable Price for any future exercises of this Warrant.

(e) Stock Combination Event Adjustment. If at any time and from time to time on or after the Issuance Date there occurs any stock split, stock dividend, stock combination, reverse stock split, recapitalization or other similar transaction involving the outstanding Common Stock (each, a “**Stock Combination Event**”, and such date thereof, the “**Stock Combination Event Date**”) and the Event Market Price is less than the Exercise Price then in effect (after giving effect to the adjustment in clause 2(a) above), then on or prior to the sixteenth (16th) Trading Day immediately following such Stock Combination Event (“**Stock Combination Event Adjustment Date**”), the Exercise Price then in effect on such Stock Combination Event Adjustment Date (after giving effect to the adjustment in clause 2(a) above) shall be reduced (but in no event increased) to the Event Market Price. For the avoidance of doubt, if the adjustment in the immediately preceding sentence would otherwise result in an increase in the Exercise Price hereunder, no adjustment shall be made.

(f) Other Events. In the event that the Company (or any Subsidiary (as defined in the Securities Purchase Agreement)) shall take any action to which the provisions hereof are not strictly applicable, or, if applicable, would not operate to protect the Holder from dilution or if any event occurs of the type contemplated by the provisions of this Section 2 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company’s board of directors shall in good faith determine and implement an appropriate adjustment in the Exercise Price and the number of Warrant Shares (if applicable) so as to protect the rights of the Holder, provided that no such adjustment pursuant to this Section 2(f) will increase the Exercise Price or decrease the

number of Warrant Shares as otherwise determined pursuant to this Section 2, provided further that if the Holder does not accept such adjustments as appropriately protecting its interests hereunder against such dilution, then the Company's board of directors and the Holder shall agree, in good faith, upon an independent investment bank of nationally recognized standing to make such appropriate adjustments, whose determination shall be final and binding absent manifest error and whose fees and expenses shall be borne by the Company.

(g) Calculations. All calculations under this Section 2 shall be made by rounding to the nearest cent or the nearest 1/100th of a share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issuance or sale of shares of Common Stock.

(h) Voluntary Adjustment By Company. Subject to the rules and regulations of the Principal Market, the Company may at any time during the term of this Warrant, with the prior written consent of the Required Holders (as defined in the Securities Purchase Agreement), reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the board of directors of the Company.

(i) Floor Price. No adjustment pursuant to this Section 2 shall cause the Exercise Price to be less than \$0.4506, which shall be reduced to 20% of the "Minimum Price" (as defined in Rule 5635 of the Rules of the Nasdaq Stock Market) on the Stockholder Approval Date (as defined in the Securities Purchase Agreement) if such price is lower (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the date of the Securities Purchase Agreement) (the "**Floor Price**"). Notwithstanding the foregoing, nothing contained in this Section 2(i) shall apply after Stockholder Approval (as defined in the Securities Purchase Agreement) is obtained and, on such Stockholder Approval Date, any adjustments that would have occurred hereunder prior to the Stockholder Approval Date, but for the existence of this Section 2(i), shall be applied pursuant to this Section 2 on the Stockholder Approval Date (without regard to the limitations in this Section 2(ii)) as if such event or Dilutive Issuance, as applicable, occurred on the Stockholder Approval Date.

3. Rights Upon Distribution of Assets. In addition to any adjustments pursuant to Section 2 above or Section 4(a) below, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder's right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to the extent of any such excess) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. Purchase Rights; Fundamental Transactions

(a) Purchase Rights. In addition to any adjustments pursuant to Sections 2 or 3 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the "**Purchase Rights**"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issuance or sale of such Purchase Rights (provided, however, that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) Fundamental Transactions. The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents (as defined in the Securities Purchase Agreement) in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, which is exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction) and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the consummation of each Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of the applicable Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of each Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the consummation of the applicable Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 3 and 4(a) above, which shall continue to be receivable thereafter)) issuable upon the exercise of this Warrant prior to the applicable Fundamental Transaction, such shares of publicly traded common stock (or its equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of the applicable Fundamental Transaction had this Warrant been exercised immediately prior to the applicable Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. Notwithstanding the foregoing, and without limiting Section 1(f) hereof, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 4(b) to permit the Fundamental Transaction without the assumption of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the consummation of each Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a "**Corporate Event**"), the Company shall make appropriate provision to insure that the Holder will thereafter have the right to receive upon an exercise of this Warrant at any time after the consummation of the applicable Fundamental Transaction but prior to the Expiration Date, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 3 and 4(a) above, which shall continue to be receivable thereafter)) issuable upon the exercise of the Warrant prior to such Fundamental Transaction, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other

purchase or subscription rights) which the Holder would have been entitled to receive upon the happening of the applicable Fundamental Transaction had this Warrant been exercised immediately prior to the applicable Fundamental Transaction (without regard to any limitations on the exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder.

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(c) **Black Scholes Value.** Notwithstanding the foregoing and the provisions of Section 4(b) above, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Warrant. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction.

(d) **Application.** The provisions of this Section 4 shall apply similarly and equally to successive Fundamental Transactions and Corporate Events and shall be applied as if this Warrant (and any such subsequent warrants) were fully exercisable and without regard to any limitations on the exercise of this Warrant (provided that the Holder shall continue to be entitled to the benefit of the Maximum Percentage, applied however with respect to shares of capital stock registered under the 1934 Act and thereafter receivable upon exercise of this Warrant (or any such other warrant)).

5. Noncircumvention. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation (as defined in the Securities Purchase Agreement), Bylaws (as defined in the Securities Purchase Agreement) or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issuance or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (a) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, and (b) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable shares of Common Stock upon the exercise of this Warrant. Notwithstanding anything herein to the contrary, if after the sixty (60) calendar day anniversary of the Issuance Date, the Holder is not permitted to exercise this Warrant in full for any reason (other than pursuant to restrictions set forth in Section 1(f) hereof), the Company shall use its best efforts to promptly remedy such failure, including, without limitation, obtaining such consents or approvals as necessary to permit such exercise into shares of Common Stock.

6. Warrant Holder Not Deemed a Stockholder. Except as otherwise specifically provided herein, the Holder, solely in its capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of capital stock of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in its capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which it is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders; provided that the Company shall have no such obligation to the extent such information is filed with the SEC through EDGAR and are available to the public through the EDGAR system.

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7. Reissuance of Warrants.

(a) **Transfer of Warrant.** If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) **Lost, Stolen or Mutilated Warrant.** Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant (as to which a written certification and the indemnification contemplated below shall suffice as such evidence), and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary and reasonable form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) **Exchangeable for Multiple Warrants.** This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, no warrants for fractional shares of Common Stock shall be given.

(d) **Issuance of New Warrants.** Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

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

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8. Notices.

Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant (other than the issuance of shares of Common Stock upon exercise in accordance with the terms hereof), including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon each adjustment of the Exercise Price and the number of Warrant Shares, setting forth in reasonable detail, and certifying, the calculation of such adjustment(s), (ii) at least fifteen (15) days prior to the date on which the Company closes its books or

takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder, and (iii) at least ten (10) Trading Days prior to the consummation of any Fundamental Transaction. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of its Subsidiaries, the Company shall simultaneously file such notice with the SEC (as defined in the Securities Purchase Agreement) pursuant to a Current Report on Form 8-K. If the Company or any of its Subsidiaries provides material non-public information to the Holder that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. It is expressly understood and agreed that the time of execution specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. Disclosure. Upon delivery by the Company to the Holder (or receipt by the Company from the Holder) of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall on or prior to 9:00 am, New York City time on the Business Day immediately following such notice delivery date, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its Subsidiaries, the Company so shall indicate to the Holder explicitly in writing in such notice (or immediately upon receipt of notice from the Holder, as applicable), and in the absence of any such written indication in such notice (or notification from the Company immediately upon receipt of notice from the Holder), the Holder shall be entitled to presume that information contained in the notice does not constitute material, non-public information relating to the Company or any of its Subsidiaries. Nothing contained in this Section 9 shall limit any obligations of the Company, or any rights of the Holder, under Section 4(i) of the Securities Purchase Agreement.

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10. Absence of Trading and Disclosure Restrictions. The Company acknowledges and agrees that the Holder is not a fiduciary or agent of the Company and that the Holder shall have no obligation to (a) maintain the confidentiality of any information provided by the Company or (b) refrain from trading any securities while in possession of such information in the absence of a written non-disclosure agreement signed by an officer of the Holder that explicitly provides for such confidentiality and trading restrictions. In the absence of such an executed, written non-disclosure agreement, the Company acknowledges that the Holder may freely trade in any securities issued by the Company, may possess and use any information provided by the Company in connection with such trading activity, and may disclose any such information to any third party.

11. Amendment and Waiver. Except as otherwise provided herein, the provisions of this Warrant (other than Section 1(f)) may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party.

12. Severability. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Governing Law. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at the address set forth in Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

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14. Construction; Headings. This Warrant shall be deemed to be jointly drafted by the Company and the Holder and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant. Terms used in this Warrant but defined in the other Transaction Documents shall have the meanings ascribed to such terms on the Closing Date (as defined in the Securities Purchase Agreement) in such other Transaction Documents unless otherwise consented to in writing by the Holder.

15. Dispute Resolution.

(a) Submission to Dispute Resolution.

(i) In the case of a dispute relating to the Exercise Price, the Closing Sale Price, the Bid Price, Black Scholes Consideration Value, Black Scholes Value or fair market value or the arithmetic calculation of the number of Warrant Shares (as the case may be) (including, without limitation, a dispute relating to the determination of any of the foregoing), the Company or the Holder (as the case may be) shall submit the dispute to the other party via electronic mail (A) if by the Company, within two (2) Business Days after the occurrence of the circumstances giving rise to such dispute or (B) if by the Holder, at any time after the Holder learned of the circumstances giving rise to such dispute. If the Holder and the Company are unable to promptly resolve such dispute relating to such Exercise Price, such Closing Sale Price, such Bid Price, such Black Scholes Consideration Value, Black Scholes Value or such fair market value or such arithmetic calculation of the number of Warrant Shares (as the case may be), at any time after the second (2nd) Business Day following such initial notice by the Company or the Holder (as the case may be) of such dispute to the Company or the Holder (as the case may be), then the Holder may, at its sole option, select an independent, reputable investment bank to resolve such dispute.

(ii) The Holder and the Company shall each deliver to such investment bank (A) a copy of the initial dispute submission so delivered in accordance with the first sentence of this Section 15 and (B) written documentation supporting its position with respect to such dispute, in each case, no later than 5:00 p.m. (New York time) by the fifth (5th) Business Day immediately following the date on which the Holder selected such investment bank (the "**Dispute Submission Deadline**") (the documents referred to in the immediately preceding clauses (A) and (B) are collectively referred to herein as the "**Required Dispute Documentation**") (it being understood and agreed that if either the Holder or the Company fails to so deliver all of the Required Dispute Documentation by the Dispute Submission Deadline, then the party who fails to so submit all of the

Required Dispute Documentation shall no longer be entitled to (and hereby waives its right to) deliver or submit any written documentation or other support to such investment bank with respect to such dispute and such investment bank shall resolve such dispute based solely on the Required Dispute Documentation that was delivered to such investment bank prior to the Dispute Submission Deadline). Unless otherwise agreed to in writing by both the Company and the Holder or otherwise requested by such investment bank, neither the Company nor the Holder shall be entitled to deliver or submit any written documentation or other support to such investment bank in connection with such dispute (other than the Required Dispute Documentation).

(iii) The Company and the Holder shall cause such investment bank to determine the resolution of such dispute and notify the Company and the Holder of such resolution no later than ten (10) Business Days immediately following the Dispute Submission Deadline. The fees and expenses of such investment bank shall be borne solely by the Company, and such investment bank's resolution of such dispute shall be final and binding upon all parties absent manifest error.

(b) **Miscellaneous.** The Company expressly acknowledges and agrees that (i) this Section 15 constitutes an agreement to arbitrate between the Company and the Holder (and constitutes an arbitration agreement) under the rules then in effect under § 7501, et seq. of the New York Civil Practice Law and Rules ("CPLR") and that the Holder is authorized to apply for an order to compel arbitration pursuant to CPLR § 7503(a) in order to compel compliance with this Section 15, (ii) the terms of this Warrant and each other applicable Transaction Document shall serve as the basis for the selected investment bank's resolution of the applicable dispute, such investment bank shall be entitled (and is hereby expressly authorized) to make all findings, determinations and the like that such investment bank determines are required to be made by such investment bank in connection with its resolution of such dispute, (iii) the Holder (and only the Holder), in its sole discretion, shall have the right to submit any dispute described in this Section 15 to any state or federal court sitting in The City of New York, Borough of Manhattan in lieu of utilizing the procedures set forth in this Section 15 and (iv) nothing in this Section 15 shall limit the Holder from obtaining any injunctive relief or other equitable remedies (including, without limitation, with respect to any matters described in this Section 15).

16. Remedies, Characterization, Other Obligations, Breaches and Injunctive Relief The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual and consequential damages for any failure by the Company to comply with the terms of this Warrant. The Company covenants to the Holder that there shall be no characterization concerning this instrument other than as expressly provided herein. Amounts set forth or provided for herein with respect to payments, exercises and the like (and the computation thereof) shall be the amounts to be received by the Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to specific performance and/or temporary, preliminary and permanent injunctive or other equitable relief from any court of competent jurisdiction in any such case without the necessity of proving actual damages and without posting a bond or other security. The Company shall provide all information and documentation to the Holder that is requested by the Holder to enable the Holder to confirm the Company's compliance with the terms and conditions of this Warrant (including, without limitation, compliance with Section 2 hereof). The issuance of shares and certificates for shares as contemplated hereby upon the exercise of this Warrant shall be made without charge to the Holder or such shares for any issuance tax or other costs in respect thereof, provided that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than the Holder or its agent on its behalf.

17. Payment of Collection, Enforcement and Other Costs. If (a) this Warrant is placed in the hands of an attorney for collection or enforcement or is collected or enforced through any legal proceeding or the holder otherwise takes action to collect amounts due under this Warrant or to enforce the provisions of this Warrant or (b) there occurs any bankruptcy, reorganization, receivership of the company or other proceedings affecting company creditors' rights and involving a claim under this Warrant, then the Company shall pay the costs incurred by the Holder for such collection, enforcement or action or in connection with such bankruptcy, reorganization, receivership or other proceeding, including, without limitation, attorneys' fees and disbursements.

18. Transfer. This Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company, except as may otherwise be required by Section 2(g) of the Securities Purchase Agreement and applicable securities laws.

19. Certain Definitions. For purposes of this Warrant, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended, and the rules and regulations thereunder.

(b) "**1934 Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

(c) "**Adjustment Right**" means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale in accordance with Section 2) of Common Stock (other than rights of the type described in Section 4 hereof) that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(d) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(e) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(f) "**Bid Price**" means, for any security as of the particular time of determination, the bid price for such security on the Principal Market as reported by Bloomberg as of such time of determination, or, if the Principal Market is not the principal securities exchange or trading market for such security, the bid price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg as of such time of determination, or if the foregoing does not apply, the bid price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg as of such time of determination, or, if no bid price is reported for such security by Bloomberg as of such time of determination, the average of the bid prices of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices) as of such time of determination. If the Bid Price cannot be calculated for a security as of the particular time of determination on any of the foregoing bases, the Bid Price of such security as of such time of determination shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock

combination or other similar transaction during such period.

(g) “**Black Scholes Consideration Value**” means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

(h) “**Black Scholes Value**” means the value of the unexercised portion of this Warrant remaining on the date of the Holder’s request pursuant to Section 4(c)(i), which value is calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the greater of (1) the highest Closing Sale Price of the Common Stock during the period beginning on the Trading Day immediately preceding the announcement of the applicable Fundamental Transaction (or the consummation of the applicable Fundamental Transaction, if earlier) and ending on the Trading Day of the Holder’s request pursuant to Section 4(c)(i) and (2) the sum of the price per share being offered in cash in the applicable Fundamental Transaction (if any) plus the value of the non-cash consideration being offered in the applicable Fundamental Transaction (if any), (ii) a strike price equal to the Exercise Price in effect on the date of the Holder’s request pursuant to Section 4(c)(i), (iii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the greater of (1) the remaining term of this Warrant as of the date of the Holder’s request pursuant to Section 4(c)(i) and (2) the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction or as of the date of the Holder’s request pursuant to Section 4(c)(i) if such request is prior to the date of the consummation of the applicable Fundamental Transaction, (iv) a zero cost of borrow and (v) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the earliest to occur of (A) the public disclosure of the applicable Fundamental Transaction and (B) the date of the Holder’s request pursuant to Section 4(c)(i).

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(i) “**Bloomberg**” means Bloomberg, L.P.

(j) “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(k) “**Closing Sale Price**” means, for any security as of any date, the last closing trade price for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing trade price, then the last trade price of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last trade price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing does not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no last trade price is reported for such security by Bloomberg, the average of the ask prices of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(l) “**Common Stock**” means (i) the Company’s shares of common stock, \$0.001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any capital stock resulting from a reclassification of such common stock.

(m) “**Convertible Securities**” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any Common Stock.

(n) “**Eligible Market**” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or the Principal Market.

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(o) “**Event Market Price**” means, with respect to any Stock Combination Event Date, at the Holder’s Option, (i) the quotient determined by dividing (x) the sum of the VWAP of the Common Stock for each of the five (5) lowest Trading Days during the twenty (20) consecutive Trading Day period ending and including the Trading Day immediately preceding the sixteenth (16th) Trading Day after such Stock Combination Event Date (the “**Measurement Period**”), divided by (y) five (5), or (ii) the price equal to the VWAP on any Trading Day during the Measurement Period. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

(p) “**Expiration Date**” means the date that is the fifth (5th) anniversary of the Issuance Date or, if such date falls on a day other than a Trading Day or on which trading does not take place on the Principal Market (a “**Holiday**”), the next date that is not a Holiday.

(q) “**Fundamental Transaction**” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger,

consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock not held by all such Subject Entities as of the date of this Warrant calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction. Notwithstanding the foregoing, the issuance and sale by the Company of (i) newly-designated shares of the Company's Series G Convertible Preferred Stock, par value \$0.001 per share, and (ii) warrants to purchase shares of the Company's Common Stock with a term of five (5) years from the date of issuance, pursuant to that certain Securities Purchase Agreement, dated as of May 20, 2024, between the Company and the investors party thereto, shall not constitute a Fundamental Transaction.

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(r) **"Group"** means a "group" as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(s) **"Options"** means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(t) **"Parent Entity"** of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(u) **"Person"** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity or a government or any department or agency thereof.

(v) **"Principal Market"** means the Nasdaq Capital Market.

(w) **"Registration Rights Agreement"** means that certain registration rights agreement, dated as of the Closing Date, by and among the Company and the Buyers of the Preferred Shares and SPA Warrants relating to, among other things, the registration of the resale of the shares of Common Stock issuable upon conversion of the Preferred Shares or otherwise pursuant to the terms of the Certificate of Designations and exercise of the SPA Warrants, as may be amended from time to time.

(x) **"SEC"** means the United States Securities and Exchange Commission or the successor thereto.

(y) **"Subject Entity"** means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(z) **"Successor Entity"** means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

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(aa) **"Trading Day"** means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price or trading volume determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(bb) **"VWAP"** means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded), during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg through its "VAP" function (set to 09:30 start time and 16:00 end time) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

[Signature page follows.]

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IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

COMPANY:

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

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**EXERCISE NOTICE
TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK
MYMD PHARMACEUTICALS, INC.**

The undersigned holder hereby elects to exercise the Warrant to Purchase Common Stock No. _____ (the "Warrant") of MYMD PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), as specified below. Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. **Form of Exercise Price.** The Holder intends that payment of the Aggregate Exercise Price shall be made as:

a "Cash Exercise" with respect to _____ Warrant Shares; and/or

a "Cashless Exercise" with respect to _____ Warrant Shares.

In the event that the Holder has elected a Cashless Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the Holder hereby represents and warrants that (i) this Exercise Notice was executed by the Holder at _____ [a.m.][p.m.] on the date set forth below and (ii) if applicable, the Bid Price as of such time of execution of this Exercise Notice was \$ _____.

2. **Payment of Exercise Price.** In the event that the Holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the Holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. **Delivery of Warrant Shares.** The Company shall deliver to Holder, or its designee or agent as specified below, _____ shares of Common Stock in accordance with the terms of the Warrant. Delivery shall be made to Holder, or for its benefit, as follows:

Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: _____

Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant:: _____

DTC Number: _____

Account Number: _____

Date: _____,

Name of Registered Holder

By: _____

Name: _____

Title: _____

Tax ID: _____

Facsimile:: _____

E-mail Address: _____

Exhibit A-1

Exhibit B

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs _____ to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated _____, 202_, from the Company and acknowledged and agreed to by _____.

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.

Title: President and Chief Medical Officer

Exhibit B-1

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 TO THE HOLDER (IF REQUESTED BY THE COMPANY), IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD OR ELIGIBLE TO BE 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.

Form of Warrant

MYMD PHARMACEUTICALS, INC.

Warrant To Purchase Common Stock

Date of Issuance: [●], 2024 (“**Issuance Date**”)

MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, _____, the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, upon exercise of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the “**Warrant**”), at any time or times on or after the Issuance Date, but not after 11:59 p.m., New York time, on the Expiration Date (as defined below), _____ (subject to adjustment as provided herein) fully paid and non-assessable shares of Common Stock (as defined below) (the “**Warrant Shares**”, and such number of Warrant Shares, the “**Warrant Number**”). Except as otherwise defined herein, capitalized terms in this Warrant shall have the meanings set forth in Section 19 or in the Securities Purchase Agreement (as defined below). This Warrant is one of the Warrants to Purchase Common Stock (the “**SPA Warrants**”) issued pursuant to Section 1 of that certain Securities Purchase Agreement, dated as of May 20, 2024 (the “**Subscription Date**”), by and among the Company and the investors (the “**Buyers**”) referred to therein, as amended from time to time (the “**Securities Purchase Agreement**”).

1. Exercise of Warrant.

(a) **Mechanics of Exercise.** Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder on any day on or after the Issuance Date (an “**Exercise Date**”), in whole or in part, by delivery (whether via electronic mail or otherwise) of a written notice, in the form attached hereto as **Exhibit A** (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant. Within one (1) Trading Day following an exercise of this Warrant as aforesaid, the Holder shall deliver payment to the Company of an amount equal to the Exercise Price in effect on the date of such exercise multiplied by the number of Warrant Shares as to which this Warrant was so exercised (the “**Aggregate Exercise Price**”) in cash or via wire transfer of immediately available funds if the Holder did not notify the Company in such Exercise Notice that such exercise was made pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original of this Warrant in order to effect an exercise hereunder. Execution and delivery of an Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original of this Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. Execution and delivery of an Exercise Notice for all of the then-remaining Warrant Shares shall have the same effect as cancellation of the original of this Warrant after delivery of the Warrant Shares in accordance with the terms hereof. On or before the first (1st) Trading Day following the date on which the Company has received an Exercise Notice, the Company shall transmit by electronic mail an acknowledgment of confirmation of receipt of such Exercise Notice, in the form attached hereto as **Exhibit B**, to the Holder and the Company’s transfer agent (the “**Transfer Agent**”), which confirmation shall constitute an instruction to the Transfer Agent to process such Exercise Notice in accordance with the terms herein. On or before the first (1st) Trading Day following the date on which the Company has received such Exercise Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade of such Warrant Shares initiated on the applicable Exercise Date), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program (“**FAST**”) and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal at Custodian system, or (Y) if the Transfer Agent is not participating in the DTC FAST, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Exercise Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such exercise. Upon delivery of an Exercise Notice, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the certificates evidencing such Warrant Shares (as the case may be). If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise and upon surrender of this Warrant to the Company by the Holder, then, at the request of the Holder, the Company shall as soon as practicable and in no event later than two (2) Business Days after any exercise and at its own expense, issue and deliver to the Holder (or its designee) a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional shares of Common Stock are to be issued upon the exercise of this Warrant, but rather the number of shares of Common Stock to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Transfer Agent) that may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. Notwithstanding the foregoing, except in the case where an exercise of this Warrant is validly made pursuant to a Cashless Exercise, the Company’s failure to deliver Warrant Shares to the Holder on or prior to the later of (i) two (2) Trading Days after receipt of the applicable Exercise Notice (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade of such Warrant Shares initiated on the applicable Exercise Date) and (ii) one (1) Trading Day after the Company’s receipt of the Aggregate Exercise Price (or valid notice of a Cashless Exercise if permissible) (such later date, the “**Share Delivery Date**”) shall not be deemed to be a breach of this Warrant. Notwithstanding anything to the contrary contained in this Warrant or the Registration Rights Agreement, after the effective date of the Registration Statement (as defined in the Registration Rights Agreement) and prior to the Holder’s receipt of the notice of a Grace Period (as defined in the Registration Rights Agreement), the Company shall cause the Transfer Agent to deliver unlegended shares of Common Stock to the Holder (or its designee) in connection with any sale of Registrable Securities (as defined in the Registration Rights Agreement) with respect to which the Holder has entered into a contract for sale, and delivered a copy of the prospectus included as part of the particular Registration Statement to the extent applicable, and for which the Holder has not yet settled. From the Issuance Date through and including the Expiration Date, the Company shall maintain a transfer agent that participates in FAST.

(b) **Exercise Price.** For purposes of this Warrant, “**Exercise Price**” means \$1.816, subject to adjustment as provided herein.

(c) **Company’s Failure to Timely Deliver Securities.** If the Company shall fail, for any reason or for no reason, on or prior to the Share Delivery Date, either (I) if the Transfer Agent is not participating in FAST, to issue and deliver to the Holder (or its designee) a certificate for the number of Warrant Shares to which the Holder is entitled and register such Warrant Shares on the Company’s share register or, if the Transfer Agent is participating in FAST and such Warrant Shares are eligible to be resold pursuant to

Rule 144 or an effective registration statement, to credit the balance account of the Holder or the Holder's designee with DTC for such number of Warrant Shares to which the Holder is entitled upon the Holder's exercise of this Warrant (as the case may be) or (II) if a Registration Statement covering the resale of the Warrant Shares that are the subject of the Exercise Notice (the "**Unavailable Warrant Shares**") is not available for the resale of such Unavailable Warrant Shares and the Company fails to promptly (x) so notify the Holder and (y) deliver the Warrant Shares electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit/Withdrawal At Custodian system (the event described in the immediately foregoing clause (II) is hereinafter referred to as a "**Notice Failure**" and together with the event described in clause (I) above, a "**Delivery Failure**"), then, in addition to all other remedies available to the Holder, (X) the Company shall pay in cash to the Holder on each day after the Share Delivery Date and during such Delivery Failure an amount equal to 2% of the product of (A) the sum of the number of shares of Common Stock not issued to the Holder on or prior to the Share Delivery Date and to which the Holder is entitled, multiplied by (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable Exercise Date and ending on the applicable Share Delivery Date, and (Y) the Holder, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the voiding of an Exercise Notice shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date either (I) the Transfer Agent is not participating in the DTC FAST, the Company shall fail to issue and deliver to the Holder (or its designee) a certificate and register such shares of Common Stock on the Company's share register or, if the Transfer Agent is participating in the DTC FAST and such Warrant Shares are eligible to be resold pursuant to Rule 144 or an effective registration statement, the Transfer Agent shall fail to credit the balance account of the Holder or the Holder's designee with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below or (II) a Notice Failure occurs, and if on or after such Share Delivery Date the Holder acquires (in an open market transaction, stock loan or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such exercise that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Delivery Failure or Notice Failure, as applicable (a "**Buy-In**"), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions, stock loan costs and other out-of-pocket expenses, if any) for the shares of Common Stock so acquired (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the "**Buy-In Price**"), at which point the Company's obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder's exercise hereunder (as the case may be) (and to issue such Warrant Shares) shall terminate, or (ii) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such Warrant Shares or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of Warrant Shares to which the Holder is entitled upon the Holder's exercise hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of Warrant Shares multiplied by (B) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Exercise Notice and ending on the date of such issuance and payment under this clause (ii) (the "**Buy-In Payment Amount**"). Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of this Warrant as required pursuant to the terms hereof. While this Warrant is outstanding, the Company shall cause its transfer agent to participate in FAST. In addition to the foregoing rights, (i) if the Company fails to deliver the applicable number of Warrant Shares upon an exercise pursuant to Section 1 by the applicable Share Delivery Date, then the Holder shall have the right to rescind such exercise in whole or in part and retain and/or have the Company return, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the rescission of an exercise shall not affect the Company's obligation to make any payments that have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise, and (ii) if a registration statement (which may be the Registration Statement) covering the issuance or resale of the Warrant Shares that are subject to an Exercise Notice is not available for the issuance or resale, as applicable, of such Warrant Shares and the Holder has submitted an Exercise Notice prior to receiving notice of the non-availability of such registration statement and the Company has not already delivered the Warrant Shares underlying such Exercise Notice electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, the Holder shall have the option, by delivery of notice to the Company, to (x) rescind such Exercise Notice in whole or in part and retain or have returned, as the case may be, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the rescission of an Exercise Notice shall not affect the Company's obligation to make any payments that have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise, and/or (y) switch some or all of such Exercise Notice from a cash exercise to a Cashless Exercise.

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(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary (other than Section 1(f) below), if at the time of exercise hereof a Registration Statement (as defined in the Registration Rights Agreement) is not effective (or the prospectus contained therein is not available for use) for the resale by the Holder of all of the Warrant Shares, then the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the "Net Number" of Warrant Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

- A = the total number of shares with respect to which this Warrant is then being exercised.
- B = as elected by the Holder: (i) the VWAP of the Common Stock on the Trading Day immediately preceding the date of the applicable Exercise Notice if such Exercise Notice is (1) both executed and delivered pursuant to Section 1(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 1(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b)(64) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Exercise Notice or (z) the Bid Price of the Common Stock as of the time of the Holder's execution of the applicable Exercise Notice if such Exercise Notice is executed during "regular trading hours" on a Trading Day and is delivered within two (2) hours thereafter pursuant to Section 1(a) hereof, or (iii) the Closing Sale Price of the Common Stock on the date of the applicable Exercise Notice if the date of such Exercise Notice is a Trading Day and such Exercise Notice is both executed and delivered pursuant to Section 1(a) hereof after the close of "regular trading hours" on such Trading Day.
- C = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

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If the Warrant Shares are issued in a Cashless Exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, the Warrant Shares take on the registered characteristics of the Warrants being exercised. For purposes of Rule 144(d) promulgated under the 1933 Act, as in effect on the Subscription Date, it is intended that the Warrant Shares issued in a Cashless Exercise shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Securities Purchase Agreement.

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the number of Warrant Shares to be issued pursuant to the terms hereof, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 15.

(f) Limitations on Exercises.

(i) **Beneficial Ownership.** The Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the “**Maximum Percentage**”) of the Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including other SPA Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f)(i). For purposes of this Section 1(f)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the 1934 Act. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the “**Reported Outstanding Share Number**”). If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 1(f)(i), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be acquired pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “**Reduction Shares**”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of SPA Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f)(i) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f)(i) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

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(ii) **Principal Market Regulation.** The Company shall not issue any shares of Common Stock upon the exercise of this Warrant if the issuance of such shares of Common Stock (taken together with the issuance of such shares upon the conversion of the Preferred Shares (as defined in the Securities Purchase Agreement) or otherwise pursuant to the terms of the Certificate of Designations (as defined in the Securities Purchase Agreement)) would exceed the aggregate number of shares of Common Stock which the Company may issue upon exercise or conversion or otherwise pursuant to the terms of the Certificate of Designations and the SPA Warrants without breaching the Company’s obligations under the rules or regulations of the Principal Market (the number of shares which may be issued without violating such rules and regulations, the “**Exchange Cap**”), except that such limitation shall not apply in the event that the Company (A) obtains the approval of its stockholders as required by the applicable rules of the Principal Market for issuances of shares of Common Stock in excess of such amount or (B) obtains a written opinion from outside counsel to the Company that such approval is not required, which opinion shall be reasonably satisfactory to the Holder. Until such approval or such written opinion is obtained, no Buyer shall be issued in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any of the SPA Warrants or otherwise pursuant to the terms of the Certificate of Designations or the SPA Warrants, shares of Common Stock in an amount greater than the product of (i) the Exchange Cap as of the Issuance Date multiplied by (ii) the quotient of (1) the aggregate number of Preferred Shares issued to such Buyer pursuant to the Securities Purchase Agreement on the Closing Date (as defined in the Securities Purchase Agreement) divided by (2) the aggregate stated value of all Preferred Shares issued to the Buyers pursuant to the Securities Purchase Agreement on the Closing Date (with respect to each Buyer, the “**Exchange Cap Allocation**”). In the event that any Buyer shall sell or otherwise transfer any of such Buyer’s SPA Warrants, the transferee shall be allocated a pro rata portion of such Buyer’s Exchange Cap Allocation with respect to such portion of such SPA Warrants so transferred, and the restrictions of the prior sentence shall apply to such transferee with respect to the portion of the Exchange Cap Allocation so allocated to such transferee. Upon conversion and exercise in full of a holder’s Preferred Shares and SPA Warrants, the difference (if any) between such holder’s Exchange Cap Allocation and the number of shares of Common Stock actually issued to such holder upon such holder’s conversion in full of such Preferred Shares and such holder’s exercise in full of such SPA Warrants shall be allocated, to the respective Exchange Cap Allocations of the remaining holders of Preferred Shares and related SPA Warrants on a pro rata basis in proportion to the shares of Common Stock underlying the Preferred Shares and related SPA Warrants then held by each such holder of Preferred Shares and related SPA Warrants. In the event that after December 1, 2024, the Company is then prohibited from issuing any shares of Common Stock pursuant to this Section 1(f)(ii) (the “**Exchange Cap Shares**”), in lieu of issuing and delivering such Exchange Cap Shares to the Holder, the Company shall pay cash to the Holder in exchange for the cancellation of such portion of this Warrant exercisable into such Exchange Cap Shares (the “**Exchange Cap Payment Amount**”) at a price equal to the sum of (x) the product of (A) such number of Exchange Cap Shares and (B) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date the Holder delivers the applicable Exercise Notice with respect to such Exchange Cap Shares to the Company and ending on the date of such payment under this Section 1(f)(ii) and (y) to the extent the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of Exchange Cap Shares, any brokerage commissions and other out-of-pocket expenses, if any, of the Holder incurred in connection therewith.

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(g) **Reservation of Shares.**

(i) **Required Reserve Amount.** So long as this Warrant remains outstanding, following the Stockholder Approval Date, the Company shall at all times keep reserved for issuance under this Warrant a number of shares of Common Stock at least equal to 200% of the maximum number of shares of Common Stock as shall be necessary to satisfy the Company’s obligation to issue shares of Common Stock under the SPA Warrants then outstanding (without regard to any limitations on exercise) (the “**Required Reserve Amount**”); provided that at no time shall the number of shares of Common Stock reserved pursuant to this Section 1(g)(i) be reduced other than proportionally in connection with any exercise or redemption of SPA Warrants or such other event covered by Section 2(a) below. The Required Reserve Amount (including, without limitation, each increase in the number of shares so reserved) shall be allocated pro rata among the holders of the SPA Warrants based on the number of shares of Common Stock issuable upon exercise of SPA Warrants held by each holder on the Closing Date (as defined in the Securities Purchase Agreement) (without regard to any

limitations on exercise) or increase in the number of reserved shares, as the case may be (the “**Authorized Share Allocation**”). In the event that a holder shall sell or otherwise transfer any of such holder’s SPA Warrants, each transferee shall be allocated a pro rata portion of such holder’s Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any SPA Warrants shall be allocated to the remaining holders of SPA Warrants, pro rata based on the number of shares of Common Stock issuable upon exercise of the SPA Warrants then held by such holders (without regard to any limitations on exercise).

(ii) **Insufficient Authorized Shares.** If, notwithstanding Section 1(g)(i) above, and not in limitation thereof, following the Stockholder Approval Date, at any time while any of the SPA Warrants remain outstanding, the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve the Required Reserve Amount (an “**Authorized Share Failure**”), then the Company shall use its best efforts to take all action necessary to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for all the SPA Warrants then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders’ approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if at any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding shares of Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C. In the event that the Company is prohibited from issuing shares of Common Stock upon an exercise of this Warrant due to the failure by the Company to have sufficient shares of Common Stock available out of the authorized but unissued shares of Common Stock (such unavailability number of shares of Common Stock, the “**Authorization Failure Shares**”), in lieu of delivering such Authorization Failure Shares to the Holder, the Company shall pay cash in exchange for the cancellation of such portion of this Warrant exercisable into such Authorization Failure Shares at a price equal to the sum of (i) the product of (x) such number of Authorization Failure Shares and (y) the greatest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date the Holder delivers the applicable Exercise Notice with respect to such Authorization Failure Shares to the Company and ending on the date of such issuance and payment under this Section 1(g); and (ii) to the extent the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of Authorization Failure Shares, any Buy-In Payment Amount, brokerage commissions and other out-of-pocket expenses, if any, of the Holder incurred in connection therewith. Nothing contained in this Section 1(g) shall limit any obligations of the Company under any provision of the Securities Purchase Agreement.

2. Adjustment of Exercise Price and Number of Warrant Shares.

The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 2.

(a) **Stock Dividends and Splits.** Without limiting any provision of Section 2(b), Section 3 or Section 4, if the Company, at any time on or after the Subscription Date, (i) pays a stock dividend on one or more classes of its then outstanding shares of Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, other than Excluded Securities (as defined in the Securities Purchase Agreement), (ii) subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its then outstanding shares of Common Stock into a larger number of shares or (iii) combines (by combination, reverse stock split or otherwise) one or more classes of its then outstanding shares of Common Stock into a smaller number of shares then in each such case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this paragraph occurs during the period that an Exercise Price is calculated hereunder, then the calculation of such Exercise Price shall be adjusted appropriately to reflect such event.

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(b) **Adjustment Upon Issuance of Shares of Common Stock.** If and whenever on or after the Subscription Date, the Company grants, issues or sells (or enters into any agreement or publicly announces its intention to grant, issue or sell), or in accordance with this Section 2 is deemed to have granted, issued or sold, any shares of Common Stock (including the issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding any Excluded Securities granted issued or sold or deemed to have been granted issued or sold) for a consideration per share (the “**New Issuance Price**”) less than a price equal to the Exercise Price in effect immediately prior to such granting, issuance or sale or deemed granting, issuance or sale (such Exercise Price then in effect is referred to herein as the “**Applicable Price**”) (the foregoing a “**Dilutive Issuance**”), then immediately after such Dilutive Issuance, the Exercise Price then in effect shall be reduced to an amount equal to the New Issuance Price. Simultaneously with any decrease in the Exercise Price pursuant to Section 2(b), the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein). For all purposes of the foregoing (including, without limitation, determining the adjusted Exercise Price and the New Issuance Price under this Section 2(b)), the following shall be applicable:

(i) **Issuance of Options.** If the Company in any manner grants, issues or sells (or enters into any agreement to grant, issue or sell) any Options and the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting, issuance or sale (or the time of execution of such agreement to grant, issue or sell, as applicable) of such Option for such price per share. For purposes of this Section 2(b)(i), the “lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting, issuance or sale (or pursuant to the agreement to grant, issue or sell, as applicable) of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such Option for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Option (or any other Person) upon the granting, issuance or sale (or the agreement to grant, issue or sell, as applicable) of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Option (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock or of such Convertible Securities upon the exercise of such Options or otherwise pursuant to the terms of or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

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(ii) **Issuance of Convertible Securities.** If the Company in any manner issues or sells (or enters into any agreement to issue or sell) any Convertible Securities and the lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale (or the time of execution of such agreement to issue or sell, as applicable) of such Convertible Securities for such price per share. For the purposes of this Section 2(b)(ii), the “lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to one share of Common Stock upon the issuance or sale (or pursuant to the agreement to issue or sell, as applicable) of the Convertible Security and upon conversion, exercise

or exchange of such Convertible Security or otherwise pursuant to the terms thereof and (y) the lowest conversion price set forth in such Convertible Security for which one share of Common Stock is issuable (or may become issuable assuming all possible market conditions) upon conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Convertible Security (or any other Person) upon the issuance or sale (or the agreement to issue or sell, as applicable) of such Convertible Security plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Convertible Security (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities or otherwise pursuant to the terms thereof, and if any such issuance or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of this Warrant has been or is to be made pursuant to other provisions of this Section 2(b), except as contemplated below, no further adjustment of the Exercise Price shall be made by reason of such issuance or sale.

(iii) Change in Option Price or Rate of Conversion. If the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares of Common Stock increases or decreases at any time (other than proportional changes in conversion or exercise prices, as applicable, in connection with an event referred to in Section 2(a)), the Exercise Price in effect at the time of such increase or decrease shall be adjusted to the Exercise Price which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 2(b)(iii), if the terms of any Option or Convertible Security (including, without limitation, any Option or Convertible Security that was outstanding as of the Subscription Date) are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 2(b) shall be made if such adjustment would result in an increase of the Exercise Price then in effect.

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(iv) Calculation of Consideration Received. If any Option and/or Convertible Security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company (as determined by the Holder, the “**Primary Security**”, and such Option and/or Convertible Security and/or Adjustment Right, the “**Secondary Securities**” and together with the Primary Security, each a “**Unit**”), together comprising one integrated transaction, the aggregate consideration per share of Common Stock with respect to such Primary Security shall be deemed to be the lower of (x) the purchase price of such Unit, (y) if such Primary Security is an Option and/or Convertible Security, the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise or conversion of the Primary Security in accordance with Sections 2(b)(i) or 2(b)(ii) above and (z) the lowest VWAP of the shares of Common Stock on any Trading Day during the five (5) Trading Day period (the “**Adjustment Period**”) immediately following the public announcement of such Dilutive Issuance (for the avoidance of doubt, if such public announcement is released prior to the opening of the Principal Market on a Trading Day, such Trading Day shall be the first Trading Day in such five Trading Day period and if this Warrant is exercised, on any given Exercise Date during any such Adjustment Period, solely with respect to such portion of this Warrant exercised on such applicable Exercise Date, such applicable Adjustment Period shall be deemed to have ended on, and included, the Trading Day immediately prior to such Exercise Date). If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount of consideration received by the Company therefor. If any shares of Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company for such securities will be the arithmetic average of the VWAPs of such security for each of the five (5) Trading Days immediately preceding the date of receipt. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities (as the case may be). The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Holder. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five (5) Trading Days after the tenth (10th) day following such Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Holder. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) Record Date. If the Company takes a record of the holders of shares of Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase shares of Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issuance or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase (as the case may be).

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(c) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to this Section 2, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein).

(d) Holder’s Right of Alternative Exercise Price Following Issuance of Certain Options or Convertible Securities. In addition to and not in limitation of the other provisions of this Section 2, if the Company in any manner issues or sells or enters into any agreement to issue or sell, any Common Stock, Options or Convertible Securities (any such securities, “**Variable Price Securities**”) after the Subscription Date that are issuable pursuant to such agreement or convertible into or exchangeable or exercisable for shares of Common Stock at a price which varies or may vary with the market price of the shares of Common Stock, including by way of one or more reset(s) to a fixed price, but exclusive of such formulations reflecting customary anti-dilution provisions (such as share splits, share combinations, share dividends and similar transactions) (each of the formulations for such variable price being herein referred to as, the “**Variable Price**”), the Company shall provide written notice thereof via electronic mail and overnight courier to the Holder on the date of such agreement and the issuance of such Convertible Securities or Options. From and after the date the Company enters into such agreement or issues any such Variable Price Securities, the Holder shall have the right, but not the obligation, in its sole discretion to substitute the Variable Price for the Exercise Price upon exercise of this Warrant by designating in the Exercise Notice delivered upon any exercise of this Warrant that solely for purposes of such exercise the Holder is relying on the Variable Price rather than the Exercise Price then in effect. The Holder’s election to rely on a Variable Price for a particular exercise of this Warrant shall not obligate the Holder to rely on a Variable Price for any future exercises of this Warrant.

(e) Stock Combination Event Adjustment. If at any time and from time to time on or after the Issuance Date there occurs any stock split, stock dividend, stock combination, reverse stock split, recapitalization or other similar transaction involving the outstanding Common Stock (each, a “**Stock Combination Event**”, and such date thereof, the “**Stock Combination Event Date**”) and the Event Market Price is less than the Exercise Price then in effect (after giving effect to the adjustment in clause 2(a) above), then on or prior to the sixteenth (16th) Trading Day immediately following such Stock Combination Event (“**Stock Combination Event Adjustment Date**”), the Exercise Price then in effect on such Stock Combination Event Adjustment Date (after giving effect to the adjustment in clause 2(a) above) shall be reduced (but in no event increased) to the Event Market Price. For the avoidance of doubt, if the adjustment in the immediately preceding sentence would otherwise result in an increase in the Exercise Price hereunder, no adjustment shall be made.

(f) Other Events. In the event that the Company (or any Subsidiary (as defined in the Securities Purchase Agreement)) shall take any action to which the provisions hereof are not strictly applicable, or, if applicable, would not operate to protect the Holder from dilution or if any event occurs of the type contemplated by the provisions of this Section 2 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company’s board of directors shall in good faith determine and implement an appropriate adjustment in the Exercise Price and the number of Warrant Shares (if applicable) so as to protect the rights of the Holder, provided that no such adjustment pursuant to this Section 2(f) will increase the Exercise Price or decrease the

number of Warrant Shares as otherwise determined pursuant to this Section 2, provided further that if the Holder does not accept such adjustments as appropriately protecting its interests hereunder against such dilution, then the Company's board of directors and the Holder shall agree, in good faith, upon an independent investment bank of nationally recognized standing to make such appropriate adjustments, whose determination shall be final and binding absent manifest error and whose fees and expenses shall be borne by the Company.

(g) Calculations. All calculations under this Section 2 shall be made by rounding to the nearest cent or the nearest 1/100th of a share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issuance or sale of shares of Common Stock.

(h) Voluntary Adjustment By Company. Subject to the rules and regulations of the Principal Market, the Company may at any time during the term of this Warrant, with the prior written consent of the Required Holders (as defined in the Securities Purchase Agreement), reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the board of directors of the Company.

(i) Floor Price. No adjustment pursuant to this Section 2 shall cause the Exercise Price to be less than \$0.4506, which shall be reduced to 20% of the "Minimum Price" (as defined in Rule 5635 of the Rules of the Nasdaq Stock Market) on the Stockholder Approval Date (as defined in the Securities Purchase Agreement) if such price is lower (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the date of the Securities Purchase Agreement) (the "**Floor Price**"). Notwithstanding the foregoing, nothing contained in this Section 2(i) shall apply after Stockholder Approval (as defined in the Securities Purchase Agreement) is obtained and, on such Stockholder Approval Date, any adjustments that would have occurred hereunder prior to the Stockholder Approval Date, but for the existence of this Section 2(i), shall be applied pursuant to this Section 2 on the Stockholder Approval Date (without regard to the limitations in this Section 2(ii)) as if such event or Dilutive Issuance, as applicable, occurred on the Stockholder Approval Date.

3. Rights Upon Distribution of Assets. In addition to any adjustments pursuant to Section 2 above or Section 4(a) below, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder's right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to the extent of any such excess) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. Purchase Rights; Fundamental Transactions

(a) Purchase Rights. In addition to any adjustments pursuant to Sections 2 or 3 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the "**Purchase Rights**"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issuance or sale of such Purchase Rights (provided, however, that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) Fundamental Transactions. The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents (as defined in the Securities Purchase Agreement) in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, which is exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction) and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the consummation of each Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of the applicable Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of each Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the consummation of the applicable Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 3 and 4(a) above, which shall continue to be receivable thereafter)) issuable upon the exercise of this Warrant prior to the applicable Fundamental Transaction, such shares of publicly traded common stock (or its equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of the applicable Fundamental Transaction had this Warrant been exercised immediately prior to the applicable Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. Notwithstanding the foregoing, and without limiting Section 1(f) hereof, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 4(b) to permit the Fundamental Transaction without the assumption of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the consummation of each Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a "**Corporate Event**"), the Company shall make appropriate provision to insure that the Holder will thereafter have the right to receive upon an exercise of this Warrant at any time after the consummation of the applicable Fundamental Transaction but prior to the Expiration Date, in lieu of the shares of the Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 3 and 4(a) above, which shall continue to be receivable thereafter)) issuable upon the exercise of the Warrant prior to such Fundamental Transaction, such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other

purchase or subscription rights) which the Holder would have been entitled to receive upon the happening of the applicable Fundamental Transaction had this Warrant been exercised immediately prior to the applicable Fundamental Transaction (without regard to any limitations on the exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder.

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(c) **Black Scholes Value.** Notwithstanding the foregoing and the provisions of Section 4(b) above, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Warrant. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction.

(d) **Application.** The provisions of this Section 4 shall apply similarly and equally to successive Fundamental Transactions and Corporate Events and shall be applied as if this Warrant (and any such subsequent warrants) were fully exercisable and without regard to any limitations on the exercise of this Warrant (provided that the Holder shall continue to be entitled to the benefit of the Maximum Percentage, applied however with respect to shares of capital stock registered under the 1934 Act and thereafter receivable upon exercise of this Warrant (or any such other warrant)).

5. Noncircumvention. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation (as defined in the Securities Purchase Agreement), Bylaws (as defined in the Securities Purchase Agreement) or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issuance or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (a) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, and (b) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable shares of Common Stock upon the exercise of this Warrant. Notwithstanding anything herein to the contrary, if after the sixty (60) calendar day anniversary of the Issuance Date, the Holder is not permitted to exercise this Warrant in full for any reason (other than pursuant to restrictions set forth in Section 1(f) hereof), the Company shall use its best efforts to promptly remedy such failure, including, without limitation, obtaining such consents or approvals as necessary to permit such exercise into shares of Common Stock.

6. Warrant Holder Not Deemed a Stockholder. Except as otherwise specifically provided herein, the Holder, solely in its capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of capital stock of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in its capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which it is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders; provided that the Company shall have no such obligation to the extent such information is filed with the SEC through EDGAR and are available to the public through the EDGAR system.

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7. Reissuance of Warrants.

(a) **Transfer of Warrant.** If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) **Lost, Stolen or Mutilated Warrant.** Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant (as to which a written certification and the indemnification contemplated below shall suffice as such evidence), and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary and reasonable form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) **Exchangeable for Multiple Warrants.** This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, no warrants for fractional shares of Common Stock shall be given.

(d) **Issuance of New Warrants.** Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

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

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8. Notices.

Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant (other than the issuance of shares of Common Stock upon exercise in accordance with the terms hereof), including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon each adjustment of the Exercise Price and the number of Warrant Shares, setting forth in reasonable detail, and certifying, the calculation of such adjustment(s), (ii) at least fifteen (15) days prior to the date on which the Company closes its books or

takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder, and (iii) at least ten (10) Trading Days prior to the consummation of any Fundamental Transaction. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of its Subsidiaries, the Company shall simultaneously file such notice with the SEC (as defined in the Securities Purchase Agreement) pursuant to a Current Report on Form 8-K. If the Company or any of its Subsidiaries provides material non-public information to the Holder that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. It is expressly understood and agreed that the time of execution specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. Disclosure. Upon delivery by the Company to the Holder (or receipt by the Company from the Holder) of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall on or prior to 9:00 am, New York City time on the Business Day immediately following such notice delivery date, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its Subsidiaries, the Company so shall indicate to the Holder explicitly in writing in such notice (or immediately upon receipt of notice from the Holder, as applicable), and in the absence of any such written indication in such notice (or notification from the Company immediately upon receipt of notice from the Holder), the Holder shall be entitled to presume that information contained in the notice does not constitute material, non-public information relating to the Company or any of its Subsidiaries. Nothing contained in this Section 9 shall limit any obligations of the Company, or any rights of the Holder, under Section 4(i) of the Securities Purchase Agreement.

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10. Absence of Trading and Disclosure Restrictions. The Company acknowledges and agrees that the Holder is not a fiduciary or agent of the Company and that the Holder shall have no obligation to (a) maintain the confidentiality of any information provided by the Company or (b) refrain from trading any securities while in possession of such information in the absence of a written non-disclosure agreement signed by an officer of the Holder that explicitly provides for such confidentiality and trading restrictions. In the absence of such an executed, written non-disclosure agreement, the Company acknowledges that the Holder may freely trade in any securities issued by the Company, may possess and use any information provided by the Company in connection with such trading activity, and may disclose any such information to any third party.

11. Amendment and Waiver. Except as otherwise provided herein, the provisions of this Warrant (other than Section 1(f)) may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party.

12. Severability. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Governing Law. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at the address set forth in Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

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14. Construction; Headings. This Warrant shall be deemed to be jointly drafted by the Company and the Holder and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant. Terms used in this Warrant but defined in the other Transaction Documents shall have the meanings ascribed to such terms on the Closing Date (as defined in the Securities Purchase Agreement) in such other Transaction Documents unless otherwise consented to in writing by the Holder.

15. Dispute Resolution.

(a) Submission to Dispute Resolution.

(i) In the case of a dispute relating to the Exercise Price, the Closing Sale Price, the Bid Price, Black Scholes Consideration Value, Black Scholes Value or fair market value or the arithmetic calculation of the number of Warrant Shares (as the case may be) (including, without limitation, a dispute relating to the determination of any of the foregoing), the Company or the Holder (as the case may be) shall submit the dispute to the other party via electronic mail (A) if by the Company, within two (2) Business Days after the occurrence of the circumstances giving rise to such dispute or (B) if by the Holder, at any time after the Holder learned of the circumstances giving rise to such dispute. If the Holder and the Company are unable to promptly resolve such dispute relating to such Exercise Price, such Closing Sale Price, such Bid Price, such Black Scholes Consideration Value, Black Scholes Value or such fair market value or such arithmetic calculation of the number of Warrant Shares (as the case may be), at any time after the second (2nd) Business Day following such initial notice by the Company or the Holder (as the case may be) of such dispute to the Company or the Holder (as the case may be), then the Holder may, at its sole option, select an independent, reputable investment bank to resolve such dispute.

(ii) The Holder and the Company shall each deliver to such investment bank (A) a copy of the initial dispute submission so delivered in accordance with the first sentence of this Section 15 and (B) written documentation supporting its position with respect to such dispute, in each case, no later than 5:00 p.m. (New York time) by the fifth (5th) Business Day immediately following the date on which the Holder selected such investment bank (the "**Dispute Submission Deadline**") (the documents referred to in the immediately preceding clauses (A) and (B) are collectively referred to herein as the "**Required Dispute Documentation**") (it being understood and agreed that if either the Holder or the Company fails to so deliver all of the Required Dispute Documentation by the Dispute Submission Deadline, then the party who fails to so submit all of the

Required Dispute Documentation shall no longer be entitled to (and hereby waives its right to) deliver or submit any written documentation or other support to such investment bank with respect to such dispute and such investment bank shall resolve such dispute based solely on the Required Dispute Documentation that was delivered to such investment bank prior to the Dispute Submission Deadline). Unless otherwise agreed to in writing by both the Company and the Holder or otherwise requested by such investment bank, neither the Company nor the Holder shall be entitled to deliver or submit any written documentation or other support to such investment bank in connection with such dispute (other than the Required Dispute Documentation).

(iii) The Company and the Holder shall cause such investment bank to determine the resolution of such dispute and notify the Company and the Holder of such resolution no later than ten (10) Business Days immediately following the Dispute Submission Deadline. The fees and expenses of such investment bank shall be borne solely by the Company, and such investment bank's resolution of such dispute shall be final and binding upon all parties absent manifest error.

(b) **Miscellaneous.** The Company expressly acknowledges and agrees that (i) this Section 15 constitutes an agreement to arbitrate between the Company and the Holder (and constitutes an arbitration agreement) under the rules then in effect under § 7501, et seq. of the New York Civil Practice Law and Rules ("CPLR") and that the Holder is authorized to apply for an order to compel arbitration pursuant to CPLR § 7503(a) in order to compel compliance with this Section 15, (ii) the terms of this Warrant and each other applicable Transaction Document shall serve as the basis for the selected investment bank's resolution of the applicable dispute, such investment bank shall be entitled (and is hereby expressly authorized) to make all findings, determinations and the like that such investment bank determines are required to be made by such investment bank in connection with its resolution of such dispute, (iii) the Holder (and only the Holder), in its sole discretion, shall have the right to submit any dispute described in this Section 15 to any state or federal court sitting in The City of New York, Borough of Manhattan in lieu of utilizing the procedures set forth in this Section 15 and (iv) nothing in this Section 15 shall limit the Holder from obtaining any injunctive relief or other equitable remedies (including, without limitation, with respect to any matters described in this Section 15).

16. Remedies, Characterization, Other Obligations, Breaches and Injunctive Relief The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual and consequential damages for any failure by the Company to comply with the terms of this Warrant. The Company covenants to the Holder that there shall be no characterization concerning this instrument other than as expressly provided herein. Amounts set forth or provided for herein with respect to payments, exercises and the like (and the computation thereof) shall be the amounts to be received by the Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to specific performance and/or temporary, preliminary and permanent injunctive or other equitable relief from any court of competent jurisdiction in any such case without the necessity of proving actual damages and without posting a bond or other security. The Company shall provide all information and documentation to the Holder that is requested by the Holder to enable the Holder to confirm the Company's compliance with the terms and conditions of this Warrant (including, without limitation, compliance with Section 2 hereof). The issuance of shares and certificates for shares as contemplated hereby upon the exercise of this Warrant shall be made without charge to the Holder or such shares for any issuance tax or other costs in respect thereof, provided that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than the Holder or its agent on its behalf.

17. Payment of Collection, Enforcement and Other Costs. If (a) this Warrant is placed in the hands of an attorney for collection or enforcement or is collected or enforced through any legal proceeding or the holder otherwise takes action to collect amounts due under this Warrant or to enforce the provisions of this Warrant or (b) there occurs any bankruptcy, reorganization, receivership of the company or other proceedings affecting company creditors' rights and involving a claim under this Warrant, then the Company shall pay the costs incurred by the Holder for such collection, enforcement or action or in connection with such bankruptcy, reorganization, receivership or other proceeding, including, without limitation, attorneys' fees and disbursements.

18. Transfer. This Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company, except as may otherwise be required by Section 2(g) of the Securities Purchase Agreement and applicable securities laws.

19. Certain Definitions. For purposes of this Warrant, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended, and the rules and regulations thereunder.

(b) "**1934 Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

(c) "**Adjustment Right**" means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale in accordance with Section 2) of Common Stock (other than rights of the type described in Section 4 hereof) that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(d) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(e) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(f) "**Bid Price**" means, for any security as of the particular time of determination, the bid price for such security on the Principal Market as reported by Bloomberg as of such time of determination, or, if the Principal Market is not the principal securities exchange or trading market for such security, the bid price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg as of such time of determination, or if the foregoing does not apply, the bid price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg as of such time of determination, or, if no bid price is reported for such security by Bloomberg as of such time of determination, the average of the bid prices of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices) as of such time of determination. If the Bid Price cannot be calculated for a security as of the particular time of determination on any of the foregoing bases, the Bid Price of such security as of such time of determination shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock

combination or other similar transaction during such period.

(g) **“Black Scholes Consideration Value”** means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

(h) **“Black Scholes Value”** means the value of the unexercised portion of this Warrant remaining on the date of the Holder’s request pursuant to Section 4(c)(i), which value is calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the greater of (1) the highest Closing Sale Price of the Common Stock during the period beginning on the Trading Day immediately preceding the announcement of the applicable Fundamental Transaction (or the consummation of the applicable Fundamental Transaction, if earlier) and ending on the Trading Day of the Holder’s request pursuant to Section 4(c)(i) and (2) the sum of the price per share being offered in cash in the applicable Fundamental Transaction (if any) plus the value of the non-cash consideration being offered in the applicable Fundamental Transaction (if any), (ii) a strike price equal to the Exercise Price in effect on the date of the Holder’s request pursuant to Section 4(c)(i), (iii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the greater of (1) the remaining term of this Warrant as of the date of the Holder’s request pursuant to Section 4(c)(i) and (2) the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction or as of the date of the Holder’s request pursuant to Section 4(c)(i) if such request is prior to the date of the consummation of the applicable Fundamental Transaction, (iv) a zero cost of borrow and (v) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the earliest to occur of (A) the public disclosure of the applicable Fundamental Transaction and (B) the date of the Holder’s request pursuant to Section 4(c)(i).

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(i) **“Bloomberg”** means Bloomberg, L.P.

(j) **“Business Day”** means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(k) **“Closing Sale Price”** means, for any security as of any date, the last closing trade price for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing trade price, then the last trade price of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last trade price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing does not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no last trade price is reported for such security by Bloomberg, the average of the ask prices of any market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(l) **“Common Stock”** means (i) the Company’s shares of common stock, \$0.001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any capital stock resulting from a reclassification of such common stock.

(m) **“Convertible Securities”** means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any Common Stock.

(n) **“Eligible Market”** means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or the Principal Market.

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(o) **“Event Market Price”** means, with respect to any Stock Combination Event Date, at the Holder’s Option, (i) the quotient determined by dividing (x) the sum of the VWAP of the Common Stock for each of the five (5) lowest Trading Days during the twenty (20) consecutive Trading Day period ending and including the Trading Day immediately preceding the sixteenth (16th) Trading Day after such Stock Combination Event Date (the **“Measurement Period”**), divided by (y) five (5), or (ii) the price equal to the VWAP on any Trading Day during the Measurement Period. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

(p) **“Expiration Date”** means the date that is the eighteenth (18) month anniversary of the Issuance Date or, if such date falls on a day other than a Trading Day or on which trading does not take place on the Principal Market (a **“Holiday”**), the next date that is not a Holiday.

(q) **“Fundamental Transaction”** means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger,

consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock not held by all such Subject Entities as of the date of this Warrant calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction. Notwithstanding the foregoing, the issuance and sale by the Company of (i) newly-designated shares of the Company's Series G Convertible Preferred Stock, par value \$0.001 per share, and (ii) warrants to purchase shares of the Company's Common Stock with a term of five (5) years from the date of issuance, pursuant to that certain Securities Purchase Agreement, dated as of May 1, 2024, between the Company and the investors party thereto, shall not constitute a Fundamental Transaction.

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(r) **"Group"** means a "group" as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(s) **"Options"** means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(t) **"Parent Entity"** of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(u) **"Person"** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity or a government or any department or agency thereof.

(v) **"Principal Market"** means the Nasdaq Capital Market.

(w) **"Registration Rights Agreement"** means that certain registration rights agreement, dated as of the Closing Date, by and among the Company and the Buyers of the Preferred Shares and SPA Warrants relating to, among other things, the registration of the resale of the shares of Common Stock issuable upon conversion of the Preferred Shares or otherwise pursuant to the terms of the Certificate of Designations and exercise of the SPA Warrants, as may be amended from time to time.

(x) **"SEC"** means the United States Securities and Exchange Commission or the successor thereto.

(y) **"Subject Entity"** means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(z) **"Successor Entity"** means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

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(aa) **"Trading Day"** means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price or trading volume determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(bb) **"VWAP"** means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded), during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg through its "VAP" function (set to 09:30 start time and 16:00 end time) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30 a.m., New York time, and ending at 4:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 15. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

[Signature page follows.]

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IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

COMPANY:

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

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EXERCISE NOTICE
TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK
MYMD PHARMACEUTICALS, INC.

The undersigned holder hereby elects to exercise the Warrant to Purchase Common Stock No. _____ (the "Warrant") of MYMD PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), as specified below. Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Aggregate Exercise Price shall be made as:

- checkbox a "Cash Exercise" with respect to _____ Warrant Shares; and/or
checkbox a "Cashless Exercise" with respect to _____ Warrant Shares.

In the event that the Holder has elected a Cashless Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the Holder hereby represents and warrants that (i) this Exercise Notice was executed by the Holder at _____ [a.m.][p.m.] on the date set forth below and (ii) if applicable, the Bid Price as of such time of execution of this Exercise Notice was \$ _____.

2. Payment of Exercise Price. In the event that the Holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the Holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to Holder, or its designee or agent as specified below, _____ shares of Common Stock in accordance with the terms of the Warrant. Delivery shall be made to Holder, or for its benefit, as follows:

checkbox Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: _____

checkbox Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant: _____

DTC Number: _____

Account Number: _____

Date: _____,

Name of Registered Holder

By: _____

Name: _____

Title: _____

Tax ID: _____

Facsimile: _____

E-mail Address: _____

Exhibit A-1

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs _____ to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated _____, 202_, from the Company and acknowledged and agreed to by _____.

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

Exhibit B-1

SECURITIES PURCHASE AGREEMENT

This SECURITIES PURCHASE AGREEMENT (the “**Agreement**”), dated as of May 20, 2024, is by and among MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), and each of the investors listed on the Schedule of Buyers attached hereto (individually, a “**Buyer**” and collectively, the “**Buyers**”).

RECITALS

- A. The Company and each Buyer is executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “**1933 Act**”), and Rule 506(b) of Regulation D (“**Regulation D**”) as promulgated by the United States Securities and Exchange Commission (the “**SEC**”) under the 1933 Act.
- B. The Company has authorized, subject to acceptance of the Certificate of Designations (as defined below) by the Secretary of State of the State of Delaware, a new series of convertible preferred stock of the Company, designated as Series G Convertible Preferred Stock, no par value per share, the terms of which are set forth in the certificate of designations for such series of preferred stock (the “**Certificate of Designations**”) in the form attached hereto as Exhibit A (together with any convertible preferred shares issued in replacement thereof in accordance with the terms thereof, the “**Series G Preferred Stock**”), which Series G Preferred Stock shall be convertible into shares of common stock of the Company, par value \$0.001 per share (“**Common Stock**”) (such shares of Common Stock issuable pursuant to the terms of the Certificate of Designations, including, without limitation, upon conversion or otherwise, collectively, the “**Conversion Shares**”), in accordance with the terms of the Certificate of Designations.
- C. Each Buyer wishes to purchase, and the Company wishes to sell, upon the terms and conditions stated in this Agreement (i) such aggregate number of shares of Series G Preferred Stock set forth opposite such Buyer’s name in column (3) on the Schedule of Buyers (which aggregate amount for all Buyers shall be 8,950 Preferred Shares and shall be referred to herein as the “**Preferred Shares**”), (ii) a warrant to initially acquire up to that aggregate number of additional shares of Common Stock set forth opposite such Buyer’s name in column (4) on the Schedule of Buyers, substantially in the form attached hereto as Exhibit B (the “**Long-Term Warrants**”), and (iii) a warrant to initially acquire up to that aggregate number of additional shares of Common Stock set forth opposite such Buyer’s name in column (5) on the Schedule of Buyers, substantially in the form attached hereto as Exhibit C (the “**Short-Term Warrants**” and, collectively with the Long-Term Warrants, the “**Warrants**”) (the shares issuable upon exercise of the Warrants, the “**Warrant Shares**”).
- D. The parties hereto shall execute and deliver a Registration Rights Agreement, in the form attached hereto as Exhibit C (the “**Registration Rights Agreement**”), pursuant to which the Company has agreed to provide certain registration rights with respect to the Registrable Securities (as defined in the Registration Rights Agreement), under the 1933 Act and the rules and regulations promulgated thereunder, and applicable state securities laws.
- E. The Preferred Shares, the Conversion Shares, the Warrants and the Warrant Shares are collectively referred to herein as the “**Securities**.”

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and each Buyer hereby agree as follows:

1. Purchase and Sale of Preferred Shares and Warrants.

(a) Purchase of Preferred Shares and Warrants. Subject to the satisfaction (or waiver) of the conditions set forth in Sections 6 and 7 below, the Company shall issue and sell to each Buyer, and each Buyer severally, but not jointly, agrees to purchase from the Company on the Closing Date (as defined below), such aggregate number of Preferred Shares as is set forth opposite such Buyer’s name in column (3) on the Schedule of Buyers along with Long-Term Warrants to initially acquire up to that aggregate number of Warrant Shares as is set forth opposite such Buyer’s name in column (4) on the Schedule of Buyers and Short-Term Warrants to initially acquire up to that aggregate number of Warrant Shares as is set forth opposite such Buyer’s name in column (5) on the Schedule of Buyers.

(b) Closing. The closing (the “**Closing**”) of the purchase of the Preferred Shares and the Warrants by the Buyers shall occur remotely by the electronic transfer of Closing documentation. The date and time of the Closing (the “**Closing Date**”) shall be 10:00 a.m., New York time, on the first (1st) Business Day on which the conditions to the Closing set forth in Sections 6 and 7 below are satisfied or waived (or such other date as is mutually agreed to by the Company and each Buyer). As used herein, “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(c) Purchase Price. The aggregate purchase price for the Preferred Shares and the Warrants to be purchased by each Buyer (the “**Purchase Price**”) shall be the amount set forth opposite such Buyer’s name in column (6) on the Schedule of Buyers.

(d) Form of Payment. On the Closing Date, (i) each Buyer shall pay its respective Purchase Price (less, in the case of PharmaCyte Biotech, Inc., the lead buyer (“**Lead Buyer**”), the amounts withheld pursuant to Section 4(h)) to the Company for the Preferred Shares and the Warrants to be issued and sold to such Buyer at the Closing, by wire transfer of immediately available funds in accordance with the Company’s written wire instructions (less, in the case of the Lead Buyer, the amounts withheld pursuant to Section 4(h)) and (ii) the Company shall deliver to each Buyer (A) such aggregate number of Preferred Shares as is set forth opposite such Buyer’s name in column (3) of the Schedule of Buyers, (B) a Long-Term Warrant pursuant to which such Buyer shall have the right to initially acquire up to such aggregate number of Warrant Shares as is set forth opposite such Buyer’s name in column (4) of the Schedule of Buyers, and (C) a Short-Term Warrant pursuant to which such Buyer shall have the right to initially acquire up to such aggregate number of Warrant Shares as is set forth opposite such Buyer’s name in column (5) of the Schedule of Buyers, in each case, duly executed on behalf of the Company and registered in the name of such Buyer or its designee.

2. Buyer’s Representations and Warranties.

Each Buyer, severally and not jointly, represents and warrants to the Company with respect to only itself that, as of the date hereof and as of the Closing Date:

(a) Organization; Authority. Such Buyer is an entity duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization with the requisite power and authority to enter into and to consummate the transactions contemplated by the Transaction Documents (as defined below) to which it is a party and otherwise to carry out its obligations hereunder and thereunder.

(b) No Public Sale or Distribution. Such Buyer (i) is acquiring its Preferred Shares and Warrants, (ii) upon conversion of its Preferred Shares will acquire the Conversion Shares issuable upon conversion thereof, and (iii) upon exercise of its Warrants (other than pursuant to a Cashless Exercise (as defined in the Warrants)) will acquire the Warrant Shares issuable upon exercise thereof, in each case, 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 laws, except pursuant to sales registered or exempted under the 1933 Act; provided, however, by making the representations herein, such Buyer does not agree, or make any representation or warranty, 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 from registration under the 1933 Act and in accordance with the terms of the Securities. Such Buyer does not presently have any agreement or understanding, directly or indirectly, with any Person to distribute any of the Securities in violation of applicable securities laws. For purposes of this Agreement, "Person" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any Governmental Entity (as defined below) or any department or agency thereof.

(c) Accredited Investor Status; Experience. Such Buyer is an "accredited investor" as that term is defined in Rule 501(a) of Regulation D. Such Buyer, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. Such Buyer is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(d) Reliance on Exemptions. Such Buyer understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Buyer's compliance with, the representations, warranties, agreements, acknowledgments and understandings of such Buyer set forth herein in order to determine the availability of such exemptions and the eligibility of such Buyer to acquire the Securities.

(e) Information. Such Buyer acknowledges that it has had the opportunity to review the Transaction Documents (including all exhibits and schedules thereto) and the SEC Documents (as defined below). Such Buyer and its advisors, if any, have been 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 that have been requested by such Buyer. Such Buyer and its advisors, if any, have been afforded the opportunity to ask questions of the Company. Neither such inquiries nor any other due diligence investigations conducted by such Buyer or its advisors, if any, or its representatives shall modify, amend or affect such Buyer's right to rely on the Company's representations and warranties contained herein. Such Buyer understands that its investment in the Securities involves a high degree of risk. Such Buyer has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities.

(f) No Governmental Review. Such Buyer understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

(g) Transfer or Resale. Such Buyer understands that except as provided in the Registration Rights Agreement and herein: (i) the Securities have not been and are not being registered under the 1933 Act or any state securities laws, and may not be offered for sale, sold, assigned or transferred unless (A) subsequently registered thereunder, (B) such Buyer shall have delivered to the Company (if requested by the Company) an opinion of counsel, in a form reasonably acceptable to the Company, to the effect that such Securities to be sold, assigned or transferred may be sold, assigned or transferred pursuant to an exemption from such registration, or (C) such Buyer provides the Company with reasonable assurance that such Securities can be sold, assigned or transferred pursuant to Rule 144 or Rule 144A promulgated under the 1933 Act (or a successor rule thereto) (collectively, "**Rule 144**"); (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144, and further, if Rule 144 is not applicable, any resale of the 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 promulgated thereunder; and (iii) 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. 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 and such pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Buyer effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document (as defined in Section 3(b)), including, without limitation, this Section 2(g).

(h) Validity; Enforcement. This Agreement and the Registration Rights Agreement have been duly and validly authorized, executed and delivered on behalf of such Buyer and shall constitute the legal, valid and binding obligations of such Buyer enforceable against such Buyer in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.

(i) No Conflicts. The execution, delivery and performance by such Buyer of this Agreement and the Registration Rights Agreement and the consummation by such Buyer of the transactions contemplated hereby and thereby will not (i) result in a violation of the organizational documents of such Buyer, or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which such Buyer is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws) applicable to such Buyer, except in the case of clauses (ii) and (iii) above, for such conflicts, defaults, rights or violations which could not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the ability of such Buyer to perform its obligations hereunder.

(j) No Reliance on Placement Agents. Such Buyer acknowledges and agrees that neither the Placement Agents (as defined below) nor any affiliate of the Placement Agents has provided such Buyer with any information or advice with respect to the Securities nor is such information or advice necessary or desired. Neither the Placement Agents nor any affiliate has made or makes any representation as to the Company or the quality of the Securities and the Placement Agents and any affiliate may have acquired non-public information with respect to the Company which such Buyer agrees need not be provided to it. In connection with the issuance of the Securities to such Buyer, neither the Placement Agents nor any of their affiliates has acted as a financial advisor or fiduciary to such Buyer.

(k) Residency. Such Buyer is a resident of that jurisdiction specified below its address on the Schedule of Buyers.

(l) General Solicitation. Buyer represents that, to the knowledge of such Buyer, no Securities were offered or sold to it by means of any form of general solicitation, and Buyer is not, to such Buyer's knowledge, purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or, to the knowledge of such Buyer, any other general solicitation or general advertisement.

(m) Certain Transactions and Confidentiality. Other than consummating the transactions contemplated hereunder, such Buyer has not, nor has any Person acting on behalf of or pursuant to any understanding with such Buyer, directly or indirectly executed any purchases or sales, including Short Sales, of the securities of the Company during the period commencing as of the time that such Buyer first received a term sheet (written or oral) from the Company or any other Person representing the Company setting forth the material terms of the transactions contemplated hereunder and ending immediately prior to the execution hereof. Notwithstanding the foregoing, in the case of a Buyer that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Buyer's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Buyer's assets, the representation set forth above shall only apply with

respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement. Other than to other Persons party to this Agreement or to such Buyer's representatives, including, without limitation, its officers, directors, partners, legal and other advisors, employees, agents and affiliates, such Buyer has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction). Notwithstanding the foregoing, for the avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to locating or borrowing shares in order to effect Short Sales or similar transactions in the future. "Short Sales" means all "short sales" as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include locating and/or borrowing shares of Common Stock).

(n) **Bad Actor.** The Buyer represents, after reasonable inquiry, that none of the "Bad Actor" disqualifying events described in Rule 506(d)(1)(i) to (viii) under the 1933 Act (a "**Disqualification Event**") is applicable to the Buyer or any of its Rule 506(d) Related Parties (if any). "Rule 506(d) Related Party" means a person or entity that is a beneficial owner of the Buyer's securities for purposes of Rule 506(d).

3. Representations and Warranties of the Company.

The Company represents and warrants to each of the Buyers that, as of the date hereof and as of the Closing Date:

(a) **Organization and Qualification.** Each of the Company and each of its Subsidiaries are entities duly organized and validly existing and in good standing under the laws of the jurisdiction in which they are formed, and have the requisite power and authority to own their properties and to carry on their business as described in the SEC Documents. Each of the Company and each of its Subsidiaries is duly qualified as a foreign entity to do business and is in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not reasonably be expected to have a Material Adverse Effect (as defined below). As used in this Agreement, "Material Adverse Effect" means any material adverse effect on (i) the business, properties, assets, liabilities, operations (including results thereof), condition (financial or otherwise) or prospects of the Company and its Subsidiaries (as defined below), taken as a whole, (ii) the transactions contemplated hereby or in any of the other Transaction Documents or any other agreements or instruments to be entered into in connection herewith or therewith or (iii) the authority or ability of the Company or any of its Subsidiaries to perform any of their respective obligations under any of the Transaction Documents (as defined below). The Company has no Subsidiaries. "Subsidiaries" means any Person in which the Company, directly or indirectly, (I) owns any of the outstanding capital stock or holds any equity or similar interest of such Person or (II) controls or operates all or any part of the business, operations or administration of such Person, and each of the foregoing, is individually referred to herein as a "Subsidiary."

(b) **Authorization; Enforcement; Validity.** The Company has the requisite power and authority to enter into and perform its obligations under this Agreement and the other Transaction Documents and to issue the Securities in accordance with the terms hereof and thereof. Each Subsidiary has the requisite power and authority to enter into and perform its obligations under the Transaction Documents to which it is a party. The execution and delivery of this Agreement and the other Transaction Documents by the Company and its Subsidiaries, and the consummation by the Company and its Subsidiaries of the transactions contemplated hereby and thereby (including, without limitation, the issuance by the Company of the Preferred Shares and the reservation for issuance and issuance of the Conversion Shares issuable upon conversion of the Preferred Shares and the issuance of the Warrants and the reservation for issuance and issuance of the Warrant Shares issuable upon exercise of the Warrants) have been duly authorized by the Company's board of directors and, to the extent applicable, each of its Subsidiaries' board of directors or other governing body, as applicable, and (other than the filing with the SEC of a Form D or one or more Registration Statements in accordance with the requirements of the Registration Rights Agreement, the filing of the Certificate of Designations and the acceptance thereof by the Secretary of State of the State of Delaware, and any other filings as may be required by any state securities agencies) no further filing, consent or authorization is required by the Company, its Subsidiaries, their respective boards of directors or their stockholders or other governing body. This Agreement has been, and the other Transaction Documents to which it is a party will be prior to the Closing, duly executed and delivered by the Company, and each constitutes the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with its respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies and except as rights to indemnification and to contribution may be limited by federal or state securities law. Prior to the Closing, the Transaction Documents to which each Subsidiary is a party will be duly executed and delivered by each such Subsidiary, and shall constitute the legal, valid and binding obligations of each such Subsidiary, enforceable against each such Subsidiary in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies and except as rights to indemnification and to contribution may be limited by federal or state securities law. "Transaction Documents" means, collectively, this Agreement, the Certificate of Designations, the Registration Rights Agreement, the Warrants, the Irrevocable Transfer Agent Instructions (as defined below) and each of the other agreements and instruments entered into or delivered by the Company or any of its Subsidiaries in connection with the transactions contemplated hereby and thereby, as may be amended from time to time.

(c) **Issuance of Securities.** The issuance of the Preferred Shares, subject to the acceptance of the Certificate of Designations by the Secretary of State of the State of Delaware, and the Warrants are duly authorized and upon issuance in accordance with the terms of the Transaction Documents shall be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, mortgages, defects, claims, liens, pledges, charges, taxes, rights of first refusal, encumbrances, security interests and other encumbrances (collectively "**Liens**") with respect to the issuance thereof. As of the Closing, the Company shall have reserved from its duly authorized share capital not less than the sum of (i) 200% of the maximum number of Conversion Shares issuable upon conversion of the Preferred Shares (assuming for purposes hereof that the Preferred Shares are convertible at the initial Conversion Price and without taking into account any limitations on the conversion of the Preferred Shares set forth in the Certificate of Designations), and (ii) 200% of the maximum number of Warrant Shares initially issuable upon exercise of the Warrants (without taking into account any limitations on the exercise of the Warrants set forth therein). Upon issuance or conversion in accordance with the Preferred Shares or exercise in accordance with the Warrants (as the case may be), the Conversion Shares and the Warrant Shares, respectively, when issued, will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights or Liens with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of shares of Common Stock (other than restrictions on transfer as described in Section 2(g)). Subject to the accuracy of the representations and warranties of the Buyers in this Agreement, the offer and issuance by the Company of the Securities is exempt from registration under the 1933 Act.

(d) **No Conflicts.** The execution, delivery and performance of the Transaction Documents by the Company and its Subsidiaries and the consummation by the Company and its Subsidiaries of the transactions contemplated hereby and thereby (including, without limitation, the issuance of the Preferred Shares, the Warrants, the Conversion Shares and the Warrant Shares and the reservation for issuance of the Conversion Shares and the Warrant Shares) will not (i) result in a violation of the Company's Certificate of Incorporation, as amended and as in effect on the date hereof (the "**Certificate of Incorporation**"), and the Company's bylaws, as amended and as in effect on the date hereof (the "**Bylaws**") or other organizational documents of the Company or any of its Subsidiaries, or any capital stock or other securities of the Company or any of its Subsidiaries, (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) in any respect under, or 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 (iii) result in a violation of any law, rule, regulation, order, judgment or decree and including all applicable foreign, federal and state securities laws, rules and regulations, and the rules and regulations of The Nasdaq Capital Market (the "**Principal Market**") 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 in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) **Consents.** Neither the Company nor any Subsidiary is required to obtain any consent from, authorization or order of, or make any filing or registration with (other than the filing with the SEC of a Form D or one or more Registration Statements in accordance with the requirements of the Registration Rights Agreement, any other filings as may be required by any state securities agencies, the notice and/or application(s) to the Principal Market for the issuance and sale of the Securities and the listing of the

Conversion Shares and Warrant Shares for trading thereon in the time and manner required thereby and the acceptance of the Certificate of Designations by the Secretary of State of the State of Delaware), any Governmental Entity (as defined below) or any regulatory or self-regulatory agency or any other Person in order for it to execute, deliver or perform any of its respective obligations under or contemplated by the Transaction Documents, in each case, in accordance with the terms hereof or thereof. All consents, authorizations, orders, filings and registrations which the Company or any Subsidiary is required to obtain prior to the Closing Date pursuant to the preceding sentence have been or will be obtained or effected on or prior to the Closing Date, and neither the Company nor any of its Subsidiaries are aware of any facts or circumstances which might prevent the Company or any of its Subsidiaries from obtaining or effecting any of the registration, application or filings contemplated by the Transaction Documents. The Company is not in violation of the requirements of the Principal Market and has no knowledge of any facts or circumstances which could reasonably lead to delisting or suspension of the Common Stock in the foreseeable future. "Governmental Entity" means any nation, state, county, city, town, village, district, or other political jurisdiction of any nature, federal, state, local, municipal, foreign, or other government, governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal), multi-national organization or body; or body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature or instrumentality of any of the foregoing, including any entity or enterprise owned or controlled by a government or a public international organization or any of the foregoing.

(f) Acknowledgment Regarding Buyer's Purchase of Securities. The Company acknowledges and agrees that each Buyer is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated hereby and thereby and that no Buyer is (i) an officer or director of the Company or any of its Subsidiaries, (ii) an "affiliate" (as defined in Rule 144 or Rule 144A promulgated under the 1933 Act (or a successor rule thereto) (collectively, "**Rule 144**")) of the Company or any of its Subsidiaries or (iii) to its knowledge, a "beneficial owner" of more than 10% of the shares of Common Stock (as defined for purposes of Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the "**1934 Act**")). The Company further acknowledges that no Buyer is acting as a financial advisor or fiduciary of the Company or any of its Subsidiaries (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby, and any advice given by a Buyer or any of its representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to such Buyer's purchase of the Securities. The Company further represents to each Buyer that the Company's and each Subsidiary's decision to enter into the Transaction Documents to which it is a party has been based solely on the independent evaluation by the Company, each Subsidiary and their respective representatives.

(g) Placement Agent's Fees. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, or brokers' commissions (other than for Persons engaged by any Buyer or its investment advisor) relating to or arising out of the transactions contemplated hereby, including, without limitation, the advisory fees payable to Palladium Capital Group, LLC and GP Nurmenkari Inc. (collectively, the "**Placement Agents**") in connection with the sale of the Securities. The Company shall pay, and hold each Buyer harmless against, any liability, loss or expense (including, without limitation, attorney's fees and out-of-pocket expenses) arising in connection with any such claim. The Company acknowledges that it has engaged the Placement Agents in connection with the sale of the Securities. Other than the Placement Agents, neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the offer or sale of the Securities.

(h) No Integrated Offering. None of the Company, its Subsidiaries or any of their affiliates, nor any Person acting on their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of the issuance of any of the Securities under the 1933 Act, whether through integration with prior offerings or otherwise, or caused this offering of the Securities to require approval of stockholders of the Company for purposes of the 1933 Act or under any applicable stockholder approval provisions, including, without limitation, under the rules and regulations of any exchange or automated quotation system on which any of the securities of the Company are listed or designated for quotation. None of the Company, its Subsidiaries, their affiliates nor any Person acting on their behalf will take any action or steps that would require registration of the issuance of any of the Securities under the 1933 Act (other than pursuant to the Registration Rights Agreement) or cause the offering of any of the Securities to be integrated with other offerings of securities of the Company.

(i) Dilutive Effect. The Company understands and acknowledges that the number of Conversion Shares and Warrant Shares will increase in certain circumstances. The Company further acknowledges that its obligation to issue the Conversion Shares pursuant to the terms of the Certificate of Designations in accordance with this Agreement and Warrant Shares upon exercise of the Warrants in accordance with this Agreement, the Preferred Shares and the Warrants is, in each case, absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other stockholders of the Company.

(j) Application of Takeover Protections; Rights Agreement. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, interested stockholder, business combination, poison pill (including, without limitation, any distribution under a rights agreement), stockholder rights plan or other similar anti-takeover provision under the Certificate of Incorporation, Bylaws or other organizational documents or the laws of the jurisdiction of its incorporation or otherwise which is or could become applicable to any Buyer as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and any Buyer's ownership of the Securities. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any stockholder rights plan or similar arrangement relating to accumulations of beneficial ownership of shares of Common Stock or a change in control of the Company or any of its Subsidiaries.

(k) SEC Documents; Financial Statements. During the two (2) years prior to the date hereof, the Company has timely filed all reports, schedules, forms, proxy statements, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the 1934 Act (all of the foregoing filed prior to the date hereof and all exhibits and appendices included therein and financial statements, notes and schedules thereto and documents incorporated by reference therein being hereinafter referred to as the "**SEC Documents**"). The Company has delivered or has made available to the Buyers or their respective representatives true, correct and complete copies of each of the SEC Documents not available on the EDGAR system. 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 the light of the circumstances under which they were made, not misleading. As of their respective dates, the financial statements of the Company included in the SEC Documents complied in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto as in effect as of the time of filing. Such financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("**GAAP**"), consistently applied, during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments which will not be material, either individually or in the aggregate). No other information provided by or on behalf of the Company to any of the Buyers which is not included in the SEC Documents (including, without limitation, information referred to in Section 2(e) of this Agreement or in the disclosure schedules to this Agreement) contains any untrue statement of a material fact or omits to state any material fact necessary in order to make the statements therein not misleading, in the light of the circumstance under which they are or were made. The Company is not currently contemplating to amend or restate any of the financial statements (including, without limitation, any notes or any letter of the independent accountants of the Company with respect thereto) included in the SEC Documents (the "**Financial Statements**"), nor is the Company currently aware of facts or circumstances which would require the Company to amend or restate any of the Financial Statements, in each case, in order for any of the Financial Statements to be in compliance with GAAP and the rules and regulations of the SEC. The Company has not been informed by its independent accountants that they recommend that the Company amend or restate any of the Financial Statements or that there is any need for the Company to amend or restate any of the Financial Statements.

(l) Absence of Certain Changes. Except as disclosed in the SEC Documents, since the date of the Company's most recent audited financial statements contained in a

Form 10-K, there has been no material adverse change and no material adverse development in the business, assets, liabilities, properties, operations (including results thereof), condition (financial or otherwise) or prospects of the Company or any of its Subsidiaries. Since the date of the Company's most recent audited financial statements contained in a Form 10-K, neither the Company nor any of its Subsidiaries has (i) declared or paid any dividends, (ii) sold any assets, individually or in the aggregate, outside of the ordinary course of business or (iii) made any capital expenditures, individually or in the aggregate, outside of the ordinary course of business. Neither the Company nor any of its Subsidiaries has taken any steps to seek protection pursuant to any law or statute relating to bankruptcy, insolvency, reorganization, receivership, liquidation or winding up, nor does the Company or any Subsidiary have any knowledge or reason to believe that any of their respective creditors intend to initiate involuntary bankruptcy proceedings or any actual knowledge of any fact which would reasonably lead a creditor to do so. The Company and its Subsidiaries, individually and on a consolidated basis, are not as of the date hereof, and after giving effect to the transactions contemplated hereby to occur at the Closing, will not be Company Insolvent (as defined below). For purposes of this Section 3(l), "Company Insolvent" means, with respect to the Company and its Subsidiaries, on a consolidated basis, (A) the present fair saleable value of the Company's and its Subsidiaries' assets is less than the amount required to pay the Company's and its Subsidiaries' total Indebtedness (as defined below), (B) the Company and its Subsidiaries are unable to pay their debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured or (C) the Company and its Subsidiaries intend to incur or believe that they will incur debts that would be beyond their ability to pay as such debts mature. Neither the Company nor any of its Subsidiaries has engaged in any business or in any transaction, and is not about to engage in any business or in any transaction, for which the Company's or such Subsidiary's remaining assets constitute unreasonably small capital with which to conduct the business in which it is engaged as such business is now conducted and is proposed to be conducted.

(m) No Undisclosed Events, Liabilities, Developments or Circumstances. To the Company's knowledge, no event, liability, development or circumstance has occurred or exists that is reasonably likely to have a Material Adverse Effect.

(n) Conduct of Business: Regulatory Permits. Neither the Company nor any of its Subsidiaries is in violation of any term of or in default under its Certificate of Incorporation, organizational documents, any certificate of designations, preferences or rights of any other outstanding series of preferred stock of the Company or any of its Subsidiaries or Bylaws, their organizational charter, certificate of formation, memorandum of association, articles of association or certificate of incorporation or bylaws or other organizational documents, respectively. Neither the Company nor any of its Subsidiaries is in violation of any judgment, decree or order or any statute, ordinance, rule or regulation applicable to the Company or any of its Subsidiaries, and neither the Company nor any of its Subsidiaries will conduct its business in violation of any of the foregoing, except in all cases for possible violations which could not, individually or in the aggregate, have a Material Adverse Effect. Without limiting the generality of the foregoing, the Company is not in violation of any of the rules, regulations or requirements of the Principal Market and has no knowledge of any facts or circumstances that could reasonably lead to delisting or suspension of the Common Stock by the Principal Market in the foreseeable future. Since April 19, 2021, (i) the Common Stock has been listed or designated for quotation on the Principal Market, (ii) trading in the Common Stock has not been suspended by the SEC or the Principal Market and (iii) the Company has received no communication, written or oral, from the SEC or the Principal Market regarding the suspension or delisting of the Common Stock from the Principal Market. The Company and each of its Subsidiaries possess all certificates, authorizations and permits issued by the appropriate regulatory authorities necessary to conduct their respective businesses, except where the failure to possess such certificates, authorizations or permits would not have, individually or in the aggregate, a Material Adverse Effect, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit. There is no agreement, commitment, judgment, injunction, order or decree binding upon the Company or any of its Subsidiaries or to which the Company or any of its Subsidiaries is a party which has or would reasonably be expected to have the effect of prohibiting or materially impairing any business practice of the Company or any of its Subsidiaries, any acquisition of property by the Company or any of its Subsidiaries or the conduct of business by the Company or any of its Subsidiaries as currently conducted other than such effects, individually or in the aggregate, which have not had and would not reasonably be expected to have a Material Adverse Effect on the Company or any of its Subsidiaries.

(o) Foreign Corrupt Practices. Neither the Company, the Company's subsidiary or any director, officer, agent, employee, nor any other person acting for or on behalf of the foregoing (individually and collectively, a "Company Affiliate") have violated the U.S. Foreign Corrupt Practices Act (the "FCPA") or any other applicable anti-bribery or anti-corruption laws, nor has any Company Affiliate offered, paid, promised to pay, or authorized the payment of any money, or offered, given, promised to give, or authorized the giving of anything of value, to any officer, employee or any other person acting in an official capacity for any Governmental Entity to any political party or official thereof or to any candidate for political office (individually and collectively, a "Government Official") or to any person under circumstances where such Company Affiliate knew or was aware of a high probability that all or a portion of such money or thing of value would be offered, given or promised, directly or indirectly, to any Government Official, for the purpose of:

- (i) (A) influencing any act or decision of such Government Official in his/her official capacity, (B) inducing such Government Official to do or omit to do any act in violation of his/her lawful duty, (C) securing any improper advantage, or (D) inducing such Government Official to influence or affect any act or decision of any Governmental Entity, or
- (ii) assisting the Company or its Subsidiaries in obtaining or retaining business for or with, or directing business to, the Company or its Subsidiaries.

(p) Sarbanes-Oxley Act. The Company and each Subsidiary is in compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002, as amended, and any and all applicable rules and regulations promulgated by the SEC thereunder.

(q) Transactions With Affiliates. Except as disclosed in the SEC Documents or for which no disclosure is required in the SEC Documents, no current or former employee, partner, director, officer or stockholder (direct or indirect) of the Company or its Subsidiaries, or any associate, or, to the knowledge of the Company, any affiliate of any thereof, or any relative with a relationship no more remote than first cousin of any of the foregoing, is presently, or has ever been, (i) a party to any transaction with the Company or its Subsidiaries (including any contract, agreement or other arrangement providing for the furnishing of services by, or rental of real or personal property from, or otherwise requiring payments to, any such director, officer or stockholder or such associate or affiliate or relative Subsidiaries (other than for ordinary course services as employees, officers or directors of the Company or any of its Subsidiaries)) or (ii) the direct or indirect owner of an interest in any corporation, firm, association or business organization which is a competitor, supplier or customer of the Company or its Subsidiaries (except for a passive investment (direct or indirect) in less than 5% of the common equity of a company whose securities are traded on or quoted through an Eligible Market (as defined in the Certificate of Designations)), nor does any such Person receive income from any source other than the Company or its Subsidiaries which relates to the business of the Company or its Subsidiaries or should properly accrue to the Company or its Subsidiaries. No employee, officer, stockholder or director of the Company or any of its Subsidiaries or member of his or her immediate family is indebted to the Company or its Subsidiaries, as the case may be, nor is the Company or any of its Subsidiaries indebted (or committed to make loans or extend or guarantee credit) to any of them, other than (i) for payment of salary for services rendered, (ii) reimbursement for reasonable expenses incurred on behalf of the Company, and (iii) for other standard employee benefits made generally available to all employees or executives (including stock option agreements outstanding under any stock option plan approved by the Board of Directors of the Company).

(r) Equity Capitalization. As of the date hereof, the authorized capital stock of the Company consists solely of (i) 16,666,666 shares of Common Stock, of which 2,307,632 shares of Common Stock are issued and outstanding and 6,850,161 shares are reserved for issuance pursuant to outstanding Convertible Securities (as defined below) (other than the Preferred Shares and the Warrants) and (ii) 50,000,000 shares of preferred stock, of which 78,910 are issued and outstanding. "Convertible Securities" means any capital stock or other security of the Company or any of its Subsidiaries that is at any time and under any circumstances directly or indirectly convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any capital stock or other security of the Company (including, without limitation, Common Stock) or any of its Subsidiaries. All of such outstanding shares are duly authorized and have been, or upon issuance will be, validly issued and are fully paid and non-assessable. Except as disclosed in the SEC Documents, (i) none of the Company's or any Subsidiary's capital stock is subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company or any Subsidiary; (ii) there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any

character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any capital stock of the Company or any of its Subsidiaries, or contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional capital stock of the Company or any of its Subsidiaries or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any capital stock of the Company or any of its Subsidiaries; (iii) there are no outstanding debt securities, notes, credit agreements, credit facilities or other agreements, documents or instruments evidencing Indebtedness of the Company or any of its Subsidiaries or by which the Company or any of its Subsidiaries is or may become bound; (iv) there are no financing statements securing obligations in any amounts filed in connection with the Company or any of its Subsidiaries; (v) there are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of their securities under the 1933 Act (except pursuant to the Registration Rights Agreement); (vi) there are no outstanding securities or instruments of the Company or any of its Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to redeem a security of the Company or any of its Subsidiaries; (vii) there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities; (viii) neither the Company nor any Subsidiary has any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement; and (ix) neither the Company nor any of its Subsidiaries have any liabilities or obligations required to be disclosed in the SEC Documents which are not so disclosed in the SEC Documents, other than those incurred in the ordinary course of the Company's or its Subsidiaries' respective businesses and which, individually or in the aggregate, do not or could not have a Material Adverse Effect. The Company has furnished to the Buyers true, correct and complete copies of the Certificate of Incorporation, the Bylaws, and the terms of all Convertible Securities convertible into, or exercisable or exchangeable for, shares of Common Stock and the material rights of the holders thereof in respect thereto.

(s) Indebtedness and Other Contracts. Neither the Company nor any of its Subsidiaries, (i) has any outstanding debt securities, notes, credit agreements, credit facilities or other agreements, documents or instruments evidencing Indebtedness of the Company or any of its Subsidiaries or by which the Company or any of its Subsidiaries is or may become bound, (ii) is a party to any contract, agreement or instrument, the violation of which, or default under which, by the other party(ies) to such contract, agreement or instrument could reasonably be expected to result in a Material Adverse Effect, (iii) has any financing statements securing obligations in any amounts filed in connection with the Company or any of its Subsidiaries; (iv) is in violation of any term of, or in default under, any contract, agreement or instrument relating to any Indebtedness, except where such violations and defaults would not result, individually or in the aggregate, in a Material Adverse Effect, or (v) is a party to any contract, agreement or instrument relating to any Indebtedness, the performance of which, in the judgment of the Company's officers, has or is expected to have a Material Adverse Effect. For purposes of this Agreement: (x) "Indebtedness" of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services (including, without limitation, "finance leases" in accordance with GAAP) (other than trade payables entered into in the ordinary course of business consistent with past practice), (C) all reimbursement or payment obligations, currently due and payable, with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with GAAP, consistently applied for the periods covered thereby, is classified as a finance lease, (G) all indebtedness referred to in clauses (A) through (F) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (H) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (G) above; and (y) "Contingent Obligation" means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any Indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

(t) Litigation. There is no material action, suit, arbitration, proceeding, inquiry or investigation before or by the Principal Market, any court, public board, other Governmental Entity, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its Subsidiaries, the Common Stock or any of the Company's or its Subsidiaries' officers or directors, whether of a civil or criminal nature or otherwise, in their capacities as such, except as disclosed in the SEC Documents. To its knowledge, no director, officer or employee of the Company or any of its subsidiaries has willfully violated 18 U.S.C. §1519 or engaged in spoliation in reasonable anticipation of litigation. Without limitation of the foregoing, there has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the SEC involving the Company, any of its Subsidiaries or any current or former director or officer of the Company or any of its Subsidiaries relating to the Company. Neither the Company nor any of its Subsidiaries is subject to any order, writ, judgment, injunction, decree, determination or award of any Governmental Entity.

(u) 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 been refused any insurance coverage sought or applied for, and neither the Company nor any such Subsidiary has any reason to believe that it will be unable 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.

(v) Employee Matters; Benefit Plans.

- (i) The Company and its Subsidiaries have complied in all material respects with all applicable laws relating to wages, hours, equal opportunity, collective bargaining, workers' compensation insurance and the payment of social security and other taxes. The Company is not aware that any officer, key employee or group of employees intends to terminate his, her or their employment with the Company or its Subsidiaries, as the case may be, nor does the Company have a present intention, or know of a present intention of its Subsidiaries, to terminate the employment of any officer or key employee. There are no pending or, to the knowledge of the Company, threatened employment discrimination charges or complaints against or involving the Company or its Subsidiaries before any federal, state, or local board, department, commission or agency, or unfair labor practice charges or complaints, disputes or grievances affecting the Company or its Subsidiaries.
- (ii) No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company's or its Subsidiaries' employees is a member of a union that relates to such employee's relationship with the Company or such Subsidiary, and neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that their relationships with their employees are good.
- (iii) The Company and its Subsidiaries are in compliance in all material respects with the applicable provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). No benefit plan of the Company or any Subsidiary (a) is subject to the provisions of Section 412 of the Code or Part 3 of Subtitle B of Title I of ERISA, (b) is subject to Title IV of ERISA, (c) is a "multiemployer plan" (within the meaning of Section 3(37) of ERISA). Since inception, neither the Company, its Subsidiaries, nor any business or entity treated as a single employer with the Company or its Subsidiaries for purposes of Title IV of ERISA contributed to or was obligated to contribute to a pension plan that was at any time subject to Title IV of ERISA.

(w) Assets; Title. The Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in

all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and the Subsidiaries are in material compliance.

(x) Intellectual Property. The Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights necessary or required for use in connection with their respective businesses as described in the SEC Reports and which the failure to so have could have a Material Adverse Effect (collectively, the “**Intellectual Property Rights**”). None of, and neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of, the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years from the date of this Agreement. Neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Intellectual Property Rights violate or infringe upon the rights of any Person, except as could not have or reasonably be expected to not have a Material Adverse Effect. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(y) Environmental Laws. The Company and its Subsidiaries (A) are in compliance with any and all Environmental Laws (as defined below), (B) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (C) are in compliance with all terms and conditions of any such permit, license or approval where, in each of the foregoing clauses (A), (B) and (C), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect. 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.

(z) Subsidiary Rights. The Company or one of its Subsidiaries has the unrestricted right to vote, and (subject to limitations imposed by applicable law) to receive dividends and distributions on, all capital securities of its Subsidiaries as owned by the Company or such Subsidiary.

(aa) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and its Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) 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 and (iii) has set aside on its books provision reasonably adequate for the payment of all material 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 or of any Subsidiary know of no basis for any such claim.

(bb) Internal Accounting and Disclosure Controls. Other than as disclosed in the SEC Reports, the Company and each of its Subsidiaries maintains internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the 1934 Act) that is effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including 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 GAAP and to maintain asset and liability accountability, (iii) access to assets or incurrence of liabilities is permitted only in accordance with management’s general or specific authorization and (iv) the recorded accountability for assets and liabilities is compared with the existing assets and liabilities at reasonable intervals and appropriate action is taken with respect to any difference. Other than as disclosed in the SEC Reports, the Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the 1934 Act) that are effective in ensuring that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the SEC, including, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is accumulated and communicated to the Company’s management, including its principal executive officer or officers and its principal financial officer or officers, as appropriate, to allow timely decisions regarding required disclosure. Since January 1, 2021, other than as disclosed in the SEC Reports, neither the Company nor any of its Subsidiaries has received any notice or correspondence from any accountant, Governmental Entity or other Person relating to any material weakness or significant deficiency in any part of the internal controls over financial reporting of the Company or any of its Subsidiaries.

(cc) 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.

(dd) Investment Company Status. The Company is not, and upon consummation of the sale of the Securities will not be, an “investment company,” an affiliate of an “investment company,” a company controlled by an “investment company” or an “affiliated person” of, or “promoter” or “principal underwriter” for, an “investment company” as such terms are defined in the Investment Company Act of 1940, as amended.

(ee) Acknowledgement Regarding Buyers’ Trading Activity. It is understood and acknowledged by the Company that (i) following the public disclosure of the transactions contemplated by the Transaction Documents, in accordance with the terms thereof, none of the Buyers have been asked by the Company or any of its Subsidiaries to agree, nor has any Buyer agreed with the Company or any of its Subsidiaries, to desist from effecting any transactions in or with respect to (including, without limitation, purchasing or selling, long and/or short) any securities of the Company, or “derivative” securities based on securities issued by the Company or to hold any of the Securities for any specified term; (ii) any Buyer, and counterparties in “derivative” transactions to which any such Buyer is a party, directly or indirectly, presently may have a “short” position in the Common Stock which was established prior to such Buyer’s knowledge of the transactions contemplated by the Transaction Documents; (iii) each Buyer shall not be deemed to have any affiliation with or control over any arm’s length counterparty in any “derivative” transaction; and (iv) each Buyer may rely on the Company’s obligation to timely deliver shares of Common Stock upon conversion, exercise or exchange, as applicable, of the Securities as and when required pursuant to the Transaction Documents for purposes of effecting trading in the Common Stock of the Company. The Company further understands and acknowledges that following the public disclosure of the transactions contemplated by the Transaction Documents pursuant to the 8-K Filing (as defined below) one or more Buyers may engage in hedging and/or trading activities (including, without limitation, the location and/or reservation of borrowable shares of Common Stock) at various times during the period that the Securities are outstanding, including, without limitation, during the periods that the value and/or number of the Warrant Shares or Conversion Shares, as applicable, deliverable with respect to the Securities are being determined and such hedging and/or trading activities (including, without limitation, the location and/or reservation of borrowable shares of Common Stock), if any, can reduce the value of the existing stockholders’ equity interest in the Company both at and after the time the hedging and/or trading activities are being conducted. The Company acknowledges that such aforementioned hedging and/or trading activities do not constitute a breach of this Agreement, the Certificate of Designations, the Warrants or any other Transaction Document or any of the documents executed in connection herewith or therewith.

(ff) Manipulation of Price. Neither the Company nor any of its Subsidiaries has, and, to the knowledge of the Company, no Person acting on their behalf has, directly or indirectly, (i) taken any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company or any of its Subsidiaries 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 (other than the Placement Agents), (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company or any of its Subsidiaries or (iv) paid or agreed to pay any Person for research services with respect to any securities of the Company or any of its Subsidiaries.

(gg) U.S. Real Property Holding Corporation. Neither the Company nor any of its Subsidiaries is, or has ever been a U.S. real property holding corporation within the meaning of Section 897 of the Code, and the Company and each Subsidiary shall so certify upon any Buyer's request.

(hh) Registration Rights. Aside from rights pursuant to the Registration Rights Agreement, no Person has any right to cause the Company or any Subsidiary to effect the registration under the 1933 Act of any securities of the Company or any Subsidiary. The Company is eligible to register the Registrable Securities (as defined in the Registration Rights Agreement) for resale by the Buyers using Form S-3 promulgated under the 1933 Act.

(ii) Transfer Taxes. On the Closing Date, all stock transfer or other taxes (other than income or similar taxes) which are required to be paid in connection with the issuance, sale and transfer of the Securities to be sold to each Buyer hereunder will be, or will have been, fully paid or provided for by the Company, and all laws imposing such taxes will be or will have been complied with.

(jj) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries is subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). Neither the Company nor any of its Subsidiaries or affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(kk) Shell Company Status. The Company is not, and has never been, an issuer identified in, or subject to, Rule 144(i).

(ll) Illegal or Unauthorized Payments; Political Contributions. Neither the Company nor any of its Subsidiaries nor, to the best of the Company's knowledge (after reasonable inquiry of its officers and directors), any of the officers, directors, employees, agents or other representatives of the Company or any of its Subsidiaries or any other business entity or enterprise with which the Company or any Subsidiary is or has been affiliated or associated, has, directly or indirectly, made or authorized any payment, contribution or gift of money, property, or services, whether or not in contravention of applicable law, (i) as a kickback or bribe to any Person or (ii) to any political organization, or the holder of or any aspirant to any elective or appointive public office except for personal political contributions not involving the direct or indirect use of funds of the Company or any of its Subsidiaries.

(mm) Money Laundering. The Company and its Subsidiaries are in compliance with, and have not previously violated, the USA Patriot Act of 2001 and all other applicable U.S. and non-U.S. anti-money laundering laws and regulations, including, without limitation, the laws, regulations and Executive Orders and sanctions programs administered by the U.S. Office of Foreign Assets Control, including, but not limited, to (i) Executive Order 13224 of September 23, 2001 entitled, "Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten to Commit, or Support Terrorism" (66 Fed. Reg. 49079 (2001)) and (ii) any regulations contained in 31 CFR, Subtitle B, Chapter V.

(nn) Stock Option Plans. Each stock option granted by the Company was granted (i) in accordance with the terms of the applicable stock option plan of the Company and (ii) with an exercise price at least equal to the fair market value of the shares of Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company's stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no policy or practice of the Company to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(oo) No Disagreements with Accountants and Lawyers. There are no material disagreements of any kind presently existing, or reasonably anticipated by the Company to arise, between the Company and the accountants and lawyers formerly or presently employed by the Company and the Company is current with respect to any fees owed to its accountants and lawyers which could affect the Company's ability to perform any of its obligations under any of the Transaction Documents. In addition, on or prior to the date hereof, the Company had discussions with its accountants about its financial statements previously filed with the SEC. Based on those discussions, the Company has no reason to believe that it will need to restate any such financial statements or any part thereof.

(pp) No Disqualification Events. With respect to Securities to be offered and sold hereunder in reliance on Rule 506(b) under the 1933 Act ("Regulation D Securities"), none of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering contemplated hereby, any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the 1933 Act) connected with the Company in any capacity at the time of sale (each, an "Issuer Covered Person" and, together, "Issuer Covered Persons") is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the 1933 Act (a "Disqualification Event"), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event. The Company has complied, to the extent applicable, with its disclosure obligations under Rule 506(e), and has furnished to the Buyers a copy of any disclosures provided thereunder.

(qq) Other Covered Persons. The Company is not aware of any Person that has been or will be paid (directly or indirectly) remuneration for solicitation of Buyers or potential purchasers in connection with the sale of any Regulation D Securities.

(rr) No Additional Agreements. The Company does not have any agreement or understanding with any Buyer with respect to the transactions contemplated by the Transaction Documents other than as specified in the Transaction Documents.

(ss) Public Utility Holding Act. None of the Company nor any of its Subsidiaries is a "holding company," or an "affiliate" of a "holding company," as such terms are defined in the Public Utility Holding Act of 2005.

(tt) Federal Power Act. None of the Company nor any of its Subsidiaries is subject to regulation as a "public utility" under the Federal Power Act, as amended.

(uu) Cybersecurity. The Company and its Subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "IT Systems") are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company and its subsidiaries as currently conducted, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants that would reasonably be expected to have a Material Adverse Effect on the Company's business. The Company and its Subsidiaries have implemented and

maintained commercially reasonable physical, technical and administrative controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data, including “Personal Data,” used in connection with their businesses. “Personal Data” means (i) a natural person’s name, street address, telephone number, email address, photograph, social security number or tax identification number, driver’s license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as “personally identifying information” under the Federal Trade Commission Act, as amended; (iii) “personal data” as defined by the European Union General Data Protection Regulation (“GDPR”) (EU 2016/679); (iv) any information which would qualify as “protected health information” under the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act (collectively, “HIPAA”); and (v) any other piece of information that allows the identification of such natural person, or his or her family, or permits the collection or analysis of any data related to an identified person’s health or sexual orientation. Since January 1, 2021, there have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person or such, nor any incidents under internal review or investigations relating to the same except in each case, where such would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The Company and its Subsidiaries are presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Personal Data and to the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification except in each case, where such would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

(vv) Compliance with Data Privacy Laws. The Company and its Subsidiaries are in compliance with all applicable state and federal data privacy and security laws and regulations, including without limitation HIPAA, and the Company and its Subsidiaries have taken commercially reasonable actions to prepare to comply with, and since May 25, 2018, have been and currently are in compliance with, the GDPR (EU 2016/679) (collectively, the “Privacy Laws”) except in each case, where such would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. To ensure compliance with the Privacy Laws, the Company and its Subsidiaries have in place, comply with, and take appropriate steps reasonably designed to ensure compliance in all material respects with their policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling, and analysis of Personal Data (the “Policies”). The Company and its Subsidiaries have made all disclosures to users or customers required by applicable laws and regulatory rules or requirements, and none of such disclosures made or contained in any Policy have, to the knowledge of the Company, been inaccurate or in violation of any applicable laws and regulatory rules or requirements in any material respect. The Company further certifies that neither it nor any Subsidiary: (i) has received notice of any actual or potential liability under or relating to, or actual or potential violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation, or other corrective action pursuant to any Privacy Law; or (iii) is a party to any order, decree, or agreement that imposes any obligation or liability under any Privacy Law.

(ww) Disclosure. The Company confirms that neither it nor any other Person acting on its behalf has provided any of the Buyers or their agents or counsel with any information that constitutes or could reasonably be expected to constitute material, non-public information concerning the Company or any of its Subsidiaries, other than the existence of the transactions contemplated by this Agreement and the other Transaction Documents. The Company understands and confirms that each of the Buyers will rely on the foregoing representations in effecting transactions in securities of the Company. All disclosure provided to the Buyers regarding the Company and its Subsidiaries, their businesses and the transactions contemplated hereby, including the schedules to this Agreement, furnished by or on behalf of the Company or any of its Subsidiaries is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. Each press release issued by the Company or any of its Subsidiaries during the twelve (12) months preceding the date of this Agreement did not at the time of release contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading. Other than with respect to the transactions contemplated by this Agreement and the other Transaction Documents, no event or circumstance has occurred or information exists with respect to the Company or any of its Subsidiaries or its or their business, properties, liabilities, prospects, operations (including results thereof) or conditions (financial or otherwise), which, under applicable law, rule or regulation, requires public disclosure at or before the date hereof or announcement by the Company but which has not been so publicly disclosed. The Company acknowledges and agrees that no Buyer makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 2.

4. Covenants.

(a) Best Efforts. Each Buyer shall use its best efforts to timely satisfy each of the covenants hereunder and conditions to be satisfied by it as provided in Section 6 of this Agreement. The Company shall use its best efforts to timely satisfy each of the covenants hereunder and conditions to be satisfied by it as provided in Section 7 of this Agreement.

(b) Reserved.

(c) Form D and Blue Sky. The Company shall 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 the Closing Date, take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for, or to, qualify the Securities for sale to the Buyers at the 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 the Buyers on or prior to the Closing Date. Without limiting any other obligation of the Company under this Agreement, the Company shall timely make all filings and reports relating to the offer and sale of the Securities required under all applicable securities laws (including, without limitation, all applicable federal securities laws and all applicable “Blue Sky” laws), and the Company shall comply with all applicable federal, foreign, state and local laws, statutes, rules, regulations and the like relating to the offering and sale of the Securities to the Buyers.

(d) Reporting Status. From the date hereof until the date on which all of the Registrable Securities shall have been sold (the “Reporting Period”), the Company shall timely file all reports required to be filed with the SEC pursuant to the 1934 Act, and the Company shall not terminate its status as an issuer required to file reports under the 1934 Act even if the 1934 Act or the rules and regulations thereunder would no longer require or otherwise permit such termination. The Company shall take all reasonable actions necessary to maintain its eligibility to register the Registrable Securities for resale by the Buyers on Form S-3.

(e) Use of Proceeds. The Company shall use the proceeds from the sale of the Securities for general corporate purposes, but not, directly or indirectly, for (i) the satisfaction of any indebtedness of the Company or any of its Subsidiaries outstanding on the date hereof, (ii) the redemption or repurchase of any securities of the Company or any of its Subsidiaries, or (iii) the settlement of any litigation outstanding on the date hereof.

(f) Financial Information. The Company agrees to send the following to each Buyer during the Reporting Period (i) unless the following are filed with the SEC through EDGAR and are available to the public through the EDGAR system, within one (1) Business Day after the filing thereof with the SEC, a copy of its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, any other interim reports or any consolidated balance sheets, income statements, stockholders’ equity statements and/or cash flow statements for any period other than any annual report, any Current Reports on Form 8-K and any registration statements (other than on Form S-8) or amendments filed pursuant to the 1933 Act, (ii) unless the following are either filed with the SEC through EDGAR or are otherwise widely disseminated via a recognized news release service (such as PR Newswire), on the same day as the release thereof, email copies of all press releases issued by the Company or any of its Subsidiaries and (iii) unless the following are filed with the SEC through EDGAR, copies of any notices and other information made available or given to the stockholders of the Company, as applicable, generally, contemporaneously with the making available or giving thereof to the stockholders.

(g) Listing. The Company shall promptly secure the listing or designation for quotation (as the case may be) of all of the Conversion Shares and the Warrant Shares

upon each national securities exchange and automated quotation system, if any, upon which the Common Stock is then listed or designated for quotation (as the case may be) (subject to official notice of issuance) and shall maintain such listing or designation for quotation (as the case may be) of all of the Conversion Shares and the Warrant Shares from time to time issuable under the terms of the Transaction Documents on such national securities exchange or automated quotation system. The Company shall maintain the Common Stock's listing or authorization for quotation (as the case may be) on the Principal Market, The New York Stock Exchange, the NYSE American, the Nasdaq Global Market or the Nasdaq Global Select Market (each, an "**Eligible Market**"). Neither the Company nor any of its Subsidiaries shall take any action which could be reasonably expected to result in the delisting or suspension of the Common Stock on the Principal Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 4(g).

(h) **Fees.** The Company shall reimburse the Lead Buyer a non-accountable amount of \$100,000 for all costs and expenses incurred by it or its affiliates in connection with the structuring, documentation, negotiation and closing of the transactions contemplated by the Transaction Documents (including, without limitation, as applicable, all reasonable legal fees of outside counsel and disbursements of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. ("**Buyer Counsel**"), counsel to the Lead Buyer, any other reasonable fees and expenses in connection with the structuring, documentation, negotiation and closing of the transactions contemplated by the Transaction Documents and due diligence and regulatory filings in connection therewith). Of the \$100,000, \$25,000 was paid as an advance to the Lead buyer prior to the date of this Agreement, and the remaining \$75,000 shall be withheld by the Lead Buyer from its Purchase Price at the Closing. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, transfer agent fees, DTC (as defined below) fees or broker's commissions (other than for Persons engaged by any Buyer) relating to or arising out of the transactions contemplated hereby (including, without limitation, any fees or commissions payable to the Placement Agents). The Company shall pay, and the Company shall hold each Buyer harmless against, any liability, loss or expense (including, without limitation, reasonable attorneys' fees and out-of-pocket expenses) arising in connection with any claim relating to any such payment. Except as otherwise set forth in the Transaction Documents, each party to this Agreement shall bear its own expenses in connection with the sale of the Securities to the Buyers.

(i) **Pledge of Securities.** Notwithstanding anything to the contrary contained in this Agreement, the Company acknowledges and agrees that the Securities may be pledged by a Buyer in connection with a bona fide margin agreement or other loan or financing arrangement that is secured by the Securities. The pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Buyer effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document. The Company hereby agrees to execute and deliver such documentation as a pledgee of the Securities may reasonably request in connection with a pledge of the Securities to such pledgee by a Buyer.

(j) **Disclosure of Transactions and Other Material Information.**

- (i) **Disclosure of Transaction.** The Company shall no later than 9:30 a.m., New York time, on the Business Day following the date of this Agreement, file a Current Report on Form 8-K describing all the material terms of the transactions contemplated by the Transaction Documents in the form required by the 1934 Act and attaching all the material Transaction Documents (including, without limitation, this Agreement (and all schedules to this Agreement, to the extent material), the form of Certificate of Designations, the form of Registration Rights Agreement and the form of the Warrant) (including the attachments thereto, the "**8-K Filing**"). From and after the filing of the 8-K Filing, the Company shall have disclosed all material, non-public information (if any) provided to any of the Buyers by the Company or any of its Subsidiaries or any of their respective officers, directors, employees or agents in connection with the transactions contemplated by the Transaction Documents. In addition, effective upon the filing of the 8-K Filing, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and any of the Buyers or any of their affiliates, on the other hand, shall terminate.
- (ii) **Limitations on Disclosure.** The Company shall not, and the Company shall cause each of its Subsidiaries and each of its and their respective officers, directors, employees and agents not to, provide any Buyer with any material, non-public information regarding the Company or any of its Subsidiaries from and after the date hereof without the express prior written consent of such Buyer (which may be granted or withheld in such Buyer's sole discretion). In the event of a breach of any of the foregoing covenants, including, without limitation, Section 4(o) of this Agreement, or any of the covenants or agreements contained in any other Transaction Document, by the Company, any of its Subsidiaries, or any of its or their respective officers, directors, employees and agents (as determined in the reasonable good faith judgment of such Buyer), in addition to any other remedy provided herein or in the Transaction Documents, such Buyer shall have the right to make a public disclosure, in the form of a press release, public advertisement or otherwise, of such breach or such material, non-public information, as applicable, without the prior approval by the Company, any of its Subsidiaries, or any of its or their respective officers, directors, employees or agents. No Buyer shall have any liability to the Company, any of its Subsidiaries, or any of its or their respective officers, directors, employees, affiliates, stockholders or agents, for any such disclosure. To the extent that the Company, directly or indirectly, delivers any material, non-public information to a Buyer without such Buyer's consent, the Company hereby covenants and agrees that such Buyer shall not have any duty of confidentiality with respect to, or a duty not to trade on the basis of, such material, non-public information. Subject to the foregoing, neither the Company, its Subsidiaries nor any Buyer shall issue any press releases or any other public statements with respect to the transactions contemplated hereby; provided, however, the Company shall be entitled, without the prior approval of any Buyer, to make any press release or other public disclosure with respect to such transactions (i) in substantial conformity with the 8-K Filing and contemporaneously therewith and (ii) as is required by applicable law and regulations (provided that in the case of clause (i) each Buyer shall be consulted by the Company in connection with any such press release or other public disclosure prior to its release). Without the prior written consent of the applicable Buyer (which may be granted or withheld in such Buyer's sole discretion), the Company shall not (and shall cause each of its Subsidiaries and affiliates to not) disclose the name of such Buyer in any filing, announcement, release or otherwise. Notwithstanding anything contained in this Agreement to the contrary and without implication that the contrary would otherwise be true, the Company expressly acknowledges and agrees that no Buyer shall have (unless expressly agreed to by a particular Buyer after the date hereof in a written definitive and binding agreement executed by the Company and such particular Buyer (it being understood and agreed that no Buyer may bind any other Buyer with respect thereto)), any duty of confidentiality with respect to, or a duty not to trade on the basis of, any material, non-public information regarding the Company and/or any of its Subsidiaries.

(k) **Additional Registration Statements.** Until the Applicable Date (as defined below) and at any time thereafter while any Registration Statement is not effective or the prospectus contained therein is not available for use or any Current Public Information Failure (as defined in the Registration Rights Agreement) exists, the Company shall not file a registration statement or an offering statement under the 1933 Act relating to securities that are not the Registrable Securities (other than a registration statement on Form S-8 or such supplements or amendments to registration statements that are outstanding and have been declared effective by the SEC (solely to the extent necessary to keep such registration statements effective and available and not with respect to any Subsequent Placement)). "Applicable Date" means the earlier of (x) the first date on which the resale by the Buyers of all the Registrable Securities required to be filed on the initial Registration Statement (as defined in the Registration Rights Agreement) pursuant to the Registration Rights Agreement is declared effective by the SEC (and each prospectus contained therein is available for use on such date) or (y) the first date on which all of the Registrable Securities are eligible to be resold by the Buyers pursuant to Rule 144 (or, if a Current Public Information Failure has occurred and is continuing, such later date after which the Company has cured such Current Public Information Failure).

(l) **Additional Issuance of Securities.** So long as any Buyer beneficially owns any Preferred Shares or Warrants, the Company will not, without the prior written consent of the Required Holders, directly or indirectly, issue any other securities that would cause a breach or default under the Certificate of Designations or the Warrants. The Company agrees that for the period commencing on the date hereof and ending on the Stockholder Approval Date (the "**Restricted Period**"), neither the Company nor any of its Subsidiaries shall directly or indirectly issue, offer, sell, grant any option or right to purchase, or otherwise dispose of (or announce any issuance, offer, sale, grant of any option or right to purchase or other disposition of) any equity security or any equity-linked or related security (including, without limitation, any "equity security" (as that term is defined under Rule 405 promulgated under the 1933 Act), any Convertible Securities (as defined below), any preferred stock or any purchase rights) (any such issuance, offer,

sale, grant, disposition or announcement (whether occurring during the Restricted Period or at any time thereafter), is referred to as a “**Subsequent Placement**”). Notwithstanding the foregoing, this Section 4(l) shall not apply in respect of the issuance of (i) shares of Common Stock or standard options to purchase Common Stock issued or issuable to directors, officers, employees or other service providers of the Company in their capacity as such pursuant to an Approved Stock Plan (as defined below), provided that (1) all such issuances (taking into account the shares of Common Stock issuable upon exercise of such awards) after the date hereof pursuant to this clause (i) do not, in the aggregate, exceed more than 10% of the shares of Common Stock issued and outstanding as of the date of such issuance and (2) the exercise price of any such options is not lowered and none of such options are amended to increase the number of shares issuable thereunder; (ii) shares of Common Stock issued or issuable upon the conversion or exercise of Convertible Securities (other than shares of Common Stock issued or issuable pursuant to an Approved Stock Plan that are covered by clause (i) above) issued prior to the date hereof, provided that the conversion, exercise or other method of issuance (as the case may be) of any such Convertible Security is made solely pursuant to the conversion, exercise or other method of issuance (as the case may be) provisions of such Convertible Security that were in effect on the date immediately prior to the date hereof, the conversion, exercise or issuance price of any such Convertible Securities (other than standard options to purchase shares of Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (i) above) is not lowered, none of such Convertible Securities are amended to increase the number of shares issuable thereunder and none of the terms or conditions of any such Convertible Securities (other than those issued pursuant to an Approved Stock Plan that are covered by clause (i) above) are otherwise materially changed in any manner that adversely affects any of the Buyers, (iii) the Preferred Shares, (iv) the Conversion Shares, (v) the Warrant Shares and any other securities issued or issuable pursuant to this Agreement or any of the Transaction Documents, (vi) securities issued as consideration for the acquisition of another entity by the Company by merger, purchase of substantially all of the assets or other reorganization or bona fide joint venture agreement, provided that such issuance is approved by the majority of the disinterested directors of the Company and provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the Restricted Period and such issuance does not, in the aggregate, exceed more than 5% of the shares of Common Stock issued and outstanding immediately prior to the date hereof (each of the foregoing in clauses (i) through (vi), collectively the “**Excluded Securities**”) and (vii) provided that the closing price of the Common Stock on the Trading Market equals or exceeds 200% of the initial Conversion Price (as defined in the Certificate of Designations) for five consecutive Trading Days, sales of shares of Common Stock or Convertible Securities at a per share purchase price in excess of 160% of the initial Conversion Price (as defined in the Certificate of Designations) (as adjusted for stock splits, stock dividends, stock combinations, recapitalizations and similar events; provided that if 90% of the aggregate Stated Value (as defined in the Certificate of Designations) of the Preferred Shares has been paid in full to the Buyers or otherwise converted to Common Stock, then the Company may sell shares of Common Stock at a per share purchase price in excess of 130% of the exercise price of the Warrants). “Approved Stock Plan” means any employee benefit plan which has been approved by the board of directors of the Company prior to or subsequent to the date hereof pursuant to which shares of Common Stock or other awards convertible, exercisable for or exchangeable for shares of Common Stock may be issued to any employee, officer, director or other service provider for services provided to the Company and/or a Subsidiary in their capacity as such.

(m) **Reservation of Shares.** Following the Stockholder Approval Date (as defined herein), so long as any of the Preferred Shares or Warrants remain outstanding, the Company shall take all action necessary to at all times have authorized, and reserved for the purpose of issuance, no less than the sum of (i) 200% of the maximum number of shares of Common Stock issuable upon conversion of all the Preferred Shares then outstanding (assuming for purposes hereof that (x) the Preferred Shares are convertible at the initial Conversion Price (as defined in the Certificate of Designations) and (y) any such conversion shall not take into account any limitations on the conversion of the Preferred Shares set forth in the Certificate of Designations), and (ii) the maximum number of Warrant Shares issuable upon exercise of all the Warrants then outstanding (without regard to any limitations on the exercise of the Warrants set forth therein) (collectively, the “**Required Reserve Amount**”); provided that at no time shall the number of shares of Common Stock reserved pursuant to this Section 4(m) be reduced other than proportionally in connection with any conversion, exercise and/or redemption, as applicable of Preferred Shares and Warrants. If at any time following the Stockholder Approval Date the number of shares of Common Stock authorized and reserved for issuance is not sufficient to meet the Required Reserve Amount, the Company will promptly take all corporate action necessary to authorize and reserve a sufficient number of shares, including, without limitation, calling a special meeting of stockholders to authorize additional shares to meet the Company’s obligations pursuant to the Transaction Documents, in the case of an insufficient number of authorized shares, obtain stockholder approval of an increase in such authorized number of shares, and voting the management shares of the Company in favor of an increase in the authorized shares of the Company to ensure that the number of authorized shares is sufficient to meet the Required Reserve Amount.

(n) **Conduct of Business.** The business of the Company and its Subsidiaries shall not be conducted in violation of any law, ordinance or regulation of any Governmental Entity, except where such violations would not reasonably be expected to result, either individually or in the aggregate, in a Material Adverse Effect.

(o) **Restriction on Variable Securities.** Commencing on the date hereof until no Warrants remain outstanding, the Company and each Subsidiary shall be prohibited from effecting or entering into an agreement to effect any Subsequent Placement involving a Variable Rate Transaction. “Variable Rate Transaction” means a transaction in which the Company or any Subsidiary (i) issues or sells any Convertible Securities either (A) at a conversion, exercise or exchange rate or other price that is based upon and/or varies with the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such Convertible Securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such Convertible Securities or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock, other than pursuant to a customary “weighted average” anti-dilution provision or (ii) enters into any agreement (including, without limitation, an equity line of credit or an “at-the-market” offering) whereby the Company or any Subsidiary may sell securities at a future determined price (other than standard and customary “preemptive” or “participation” rights). Each Buyer shall be entitled to obtain injunctive relief against the Company and its Subsidiaries to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

(p) **Participation Right.** At any time after the Closing Date and until the earlier of (i) the second anniversary of the Closing Date and (ii) the date in which Preferred Shares are no longer outstanding, neither the Company nor any of its Subsidiaries shall, directly or indirectly, effect any Subsequent Placement unless the Company shall have first complied with this Section 4(p). The Company acknowledges and agrees that the right set forth in this Section 4(p) is a right granted by the Company, separately, to each Buyer.

- (i) At least two (2) Trading Days prior to any proposed or intended Subsequent Placement, the Company shall deliver to each Buyer a written notice (each such notice, a “**Pre-Notice**”), which Pre-Notice shall not contain any information (including, without limitation, material, non-public information) other than: (A) if the proposed Offer Notice (as defined below) constitutes or contains material, non-public information, a statement asking whether the Buyer is willing to accept material non-public information or (B) if the proposed Offer Notice does not constitute or contain material, non-public information, (x) a statement that the Company proposes or intends to effect a Subsequent Placement, (y) a statement that the statement in clause (x) above does not constitute material, non-public information and (z) a statement informing such Buyer that it is entitled to receive an Offer Notice (as defined below) with respect to such Subsequent Placement upon its written request. Upon the written request of a Buyer within three (3) Trading Days after the Company’s delivery to such Buyer of such Pre-Notice, and only upon a written request by such Buyer, the Company shall promptly, but no later than one (1) Trading Day after such request, deliver to such Buyer an irrevocable written notice (the “**Offer Notice**”) of any proposed or intended issuance or sale or exchange (the “**Offer**”) of the securities being offered (the “**Offered Securities**”) in a Subsequent Placement, which Offer Notice shall (A) identify and describe the Offered Securities, (B) describe the price and other terms upon which they are to be issued, sold or exchanged, and the number or amount of the Offered Securities to be issued, sold or exchanged, (C) identify the Persons (if known) to which or with which the Offered Securities are to be offered, issued, sold or exchanged and (D) offer to issue and sell to or exchange with such Buyer in accordance with the terms of the Offer such Buyer’s pro rata portion of 33 1/3% of the Offered Securities, provided that the number of Offered Securities which such Buyer shall have the right to subscribe for under this Section 4(p) shall be (x) based on such Buyer’s pro rata portion of the aggregate stated value of the Preferred Shares purchased hereunder by all Buyers (the “**Basic Amount**”), and (y) with respect to each Buyer that elects to purchase its Basic Amount, any additional portion of the Offered Securities attributable to the Basic Amounts of other Buyers as such Buyer shall indicate it will purchase or acquire should the other Buyers subscribe for less than their Basic Amounts (the “**Undersubscription Amount**”), which process shall be repeated until each Buyer shall have an opportunity to subscribe for any remaining Undersubscription Amount.

- (ii) To accept an Offer, in whole or in part, such Buyer must deliver a written notice to the Company prior to the end of the third (3rd) Business Day after such Buyer's receipt of the Offer Notice (the "**Offer Period**"), setting forth the portion of such Buyer's Basic Amount that such Buyer elects to purchase and, if such Buyer shall elect to purchase all of its Basic Amount, the Undersubscription Amount, if any, that such Buyer elects to purchase (in either case, the "**Notice of Acceptance**"). If the Basic Amounts subscribed for by all Buyers are less than the total of all of the Basic Amounts, then each Buyer who has set forth an Undersubscription Amount in its Notice of Acceptance shall be entitled to purchase, in addition to the Basic Amounts subscribed for, the Undersubscription Amount it has subscribed for; provided, however, if the Undersubscription Amounts subscribed for exceed the difference between the total of all the Basic Amounts and the Basic Amounts subscribed for (the "**Available Undersubscription Amount**"), each Buyer who has subscribed for any Undersubscription Amount shall be entitled to purchase only that portion of the Available Undersubscription Amount as the Basic Amount of such Buyer bears to the total Basic Amounts of all Buyers that have subscribed for Undersubscription Amounts, subject to rounding by the Company to the extent it deems reasonably necessary. Notwithstanding the foregoing, if the Company desires to modify or amend the terms and conditions of the Offer prior to the expiration of the Offer Period, the Company may deliver to each Buyer a new Offer Notice and the Offer Period shall expire on the third (3rd) Business Day after such Buyer's receipt of such new Offer Notice.
- (iii) The Company shall have five (5) Business Days from the expiration of the Offer Period above (A) to offer, issue, sell or exchange all or any part of such Offered Securities as to which a Notice of Acceptance has not been given by a Buyer (the "**Refused Securities**") pursuant to a definitive agreement(s) (the "**Subsequent Placement Agreement**"), but only to the offerees described in the Offer Notice (if so described therein) and only upon terms and conditions (including, without limitation, unit prices and interest rates) that are not more favorable to the acquiring Person or Persons or less favorable to the Company than those set forth in the Offer Notice and (B) to publicly announce (x) the execution of such Subsequent Placement Agreement, and (y) either (I) the consummation of the transactions contemplated by such Subsequent Placement Agreement or (II) the termination of such Subsequent Placement Agreement, which shall be filed with the SEC on a Current Report on Form 8-K with such Subsequent Placement Agreement and any documents contemplated therein filed as exhibits thereto.

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- (iv) In the event the Company shall propose to sell less than all the Refused Securities (any such sale to be in the manner and on the terms specified in Section 4(p)(iii) above), then each Buyer may, at its sole option and in its sole discretion, withdraw its Notice of Acceptance or reduce the number or amount of the Offered Securities specified in its Notice of Acceptance to an amount that shall be not less than the number or amount of the Offered Securities that such Buyer elected to purchase pursuant to Section 4(p)(ii) above multiplied by a fraction, (i) the numerator of which shall be the number or amount of Offered Securities the Company actually proposes to issue, sell or exchange (including Offered Securities to be issued or sold to Buyers pursuant to this Section 4(p) prior to such reduction) and (ii) the denominator of which shall be the original amount of the Offered Securities. In the event that any Buyer so elects to reduce the number or amount of Offered Securities specified in its Notice of Acceptance, the Company may not issue, sell or exchange more than the reduced number or amount of the Offered Securities unless and until such securities have again been offered to the Buyers in accordance with Section 4(p)(i) above.
- (v) Upon the closing of the issuance, sale or exchange of all or less than all of the Refused Securities, such Buyer shall acquire from the Company, and the Company shall issue to such Buyer, the number or amount of Offered Securities specified in its Notice of Acceptance, as reduced pursuant to Section 4(p)(iv) above if such Buyer has so elected, upon the terms and conditions specified in the Offer. The purchase by such Buyer of any Offered Securities is subject in all cases to the preparation, execution and delivery by the Company and such Buyer of a separate purchase agreement relating to such Offered Securities reasonably satisfactory in form and substance to such Buyer and its counsel.
- (vi) Any Offered Securities not acquired by a Buyer or other Persons in accordance with this Section 4(p) may not be issued, sold or exchanged until they are again offered to such Buyer under the procedures specified in this Agreement.
- (vii) The Company and each Buyer agree that if any Buyer elects to participate in the Offer, (x) neither the Subsequent Placement Agreement with respect to such Offer nor any other transaction documents related thereto (collectively, the "**Subsequent Placement Documents**") shall include any term or provision whereby such Buyer shall be required to agree to any restrictions on trading as to any securities of the Company or be required to consent to any amendment to or termination of, or grant any waiver, release or the like under or in connection with, any agreement previously entered into with the Company or any instrument received from the Company, and (y) any registration rights set forth in such Subsequent Placement Documents shall be similar in all material respects to the registration rights contained in the Registration Rights Agreement.

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- (viii) Notwithstanding anything to the contrary in this Section 4(p) and unless otherwise agreed to by such Buyer, the Company shall either confirm in writing to such Buyer that the transaction with respect to the Subsequent Placement has been abandoned or shall publicly disclose its intention to issue the Offered Securities, in either case, in such a manner such that such Buyer will not be in possession of any material, non-public information, by the fifth (5th) Business Day following delivery of the Offer Notice. If by such fifth (5th) Business Day, no public disclosure regarding a transaction with respect to the Offered Securities has been made, and no notice regarding the abandonment of such transaction has been received by such Buyer, such transaction shall be deemed to have been abandoned and such Buyer shall not be in possession of any material, non-public information with respect to the Company or any of its Subsidiaries. Should the Company decide to pursue such transaction with respect to the Offered Securities, the Company shall provide such Buyer with another Offer Notice and such Buyer will again have the right of participation set forth in this Section 4(p). The Company shall not be permitted to deliver more than one such Offer Notice to such Buyer in any sixty (60) day period, except as expressly contemplated by the last sentence of Section 4(p)(ii).

The restrictions contained in this Section 4(p) shall not apply in connection with the issuance of any Excluded Securities.

(q) **Dilutive Issuances.** For so long as any Preferred Shares or Warrants remain outstanding, the Company shall not, in any manner, enter into or affect any Dilutive Issuance (as defined in the Certificate of Designations) if the effect of such Dilutive Issuance is to cause the Company to be required to issue upon conversion of any Preferred Shares or exercise of any Warrant any shares of Common Stock in excess of that number of shares of Common Stock which the Company may issue upon conversion of the Preferred Shares and exercise of the Warrants without breaching the Company's obligations under the rules or regulations of the Principal Market.

(r) **Restriction of Redemption and Cash Dividends.** So long as any Preferred Shares are outstanding, except as provided in the Certificate of Designations, the Company shall not, directly or indirectly, redeem, or declare or pay any cash dividend or distribution on, any securities of the Company without the prior express written consent of the Buyers.

(s) **Corporate Existence.** So long as any Buyer beneficially owns any Preferred Shares or Warrants, the Company shall not be party to any Fundamental Transaction (as defined in the Certificate of Designations) unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Certificate of Designations and the Warrants.

(t) **Stock Splits.** Until the Preferred Shares are no longer outstanding, the Company shall not effect any stock combination, reverse stock split or other similar transaction (or make any public announcement or disclosure with respect to any of the foregoing) without the prior written consent of the Required Holders (as defined below); provided, however, that the Company may effect a stock combination, reverse stock split or other similar transaction if necessary to comply with the requirements of the Principal Market without the prior written consent of the Required Holders.

(u) Conversion and Exercise Procedures. Each of the form of Exercise Notice (as defined in the Warrants) included in the Warrants and the form of Conversion Notice (as defined in the Certificate of Designations) included in the Certificate of Designations set forth the totality of the procedures required of the Buyers in order to exercise the Warrants or convert the Preferred Shares. No additional legal opinion, other information or instructions shall be required of the Buyers to exercise their Warrants or convert their Preferred Shares. The Company shall honor exercises of the Warrants and conversions of the Preferred Shares and shall deliver the Conversion Shares and Warrant Shares in accordance with the terms, conditions and time periods set forth in the Certificate of Designations and Warrants.

(v) Regulation M. The Company will not take any action prohibited by Regulation M under the 1934 Act, in connection with the distribution of the Securities contemplated hereby.

(w) General Solicitation. None of the Company, any of its affiliates (as defined in Rule 501(b) under the 1933 Act) or any person acting on behalf of the Company or such affiliate will solicit any offer to buy or offer or sell the Securities in this offering by means of any form of general solicitation or general advertising within the meaning of Regulation D, including: (i) any advertisement, article, notice or other communication published in any newspaper, magazine or similar medium or broadcast over television or radio; and (ii) any seminar or meeting whose attendees have been invited by any general solicitation or general advertising.

(x) Stockholder Approval. Within 45 days of Closing, the Company shall file with the SEC a proxy statement, in a form reasonably acceptable to the Buyers, soliciting the affirmative votes of each of its stockholders of record for approval of resolutions providing for (i) the issuance of the Securities, including, for the avoidance of doubt, the approval of a change of control of the Company, in compliance with the rules and regulations of the Principal Market and (ii) an increase in the authorized shares of the Company to ensure that the number of authorized shares is sufficient to meet the Required Reserve Amount (“**Stockholder Approval**”; and the date the Stockholder Approval is obtained, the “**Stockholder Approval Date**”) and the Company shall use its reasonable best efforts to, at the expense of the Company, solicit its stockholders’ approval of such resolutions and to cause the Board of Directors of the Company to recommend to the stockholders that they approve such resolutions. The Company shall hold a special meeting of stockholders (the “**Stockholder Meeting**”) for purposes of Stockholder Approval no later than August 1, 2024 (the “**Stockholder Meeting Deadline**”), and the Company shall be obligated to seek to obtain the Stockholder Approval by the Stockholder Meeting Deadline. If, despite the Company’s reasonable best efforts the Stockholder Approval is not obtained on or prior to the Stockholder Meeting Deadline, the Company shall cause an additional Stockholder Meeting to be held within 90 days later. If, despite the Company’s reasonable best efforts the Stockholder Approval is not obtained after such subsequent stockholder meetings, the Company shall cause an additional Stockholder Meeting to be held semi-annually thereafter until such Stockholder Approval is obtained. Notwithstanding the above, the Company shall not be required to hold a Stockholder Meeting or seek Stockholder Approval any time following the time when the Preferred Shares are no longer outstanding if upon full exercise of the Warrants, the shares of Common Stock issued pursuant to the Preferred Shares and Warrants would not exceed the Exchange Cap (as defined in the Certificate of Designations). Each Buyer covenants to vote, and shall cause its affiliates to vote, all Preferred Shares owned by such Buyer or its affiliates, as applicable, in respect of any resolution presented to the stockholders of the Company for the purpose of obtaining the Stockholder Approval. For clarity, the Buyer’s agreement to vote its Preferred Shares in accordance with the foregoing sentence, does not require the Buyer to vote such shares for or against any other proposal or proposals, whether or not such other proposal or proposals are recommended by the Board of Directors.

(y) Integration. None of the Company, any of its affiliates (as defined in Rule 501(b) under the 1933 Act), or any person acting on behalf of the Company or such affiliate will sell, offer for sale, or solicit offers to buy or otherwise negotiate in respect of any security (as defined in the 1933 Act) which will be integrated with the sale of the Securities in a manner which would require the registration of the Securities under the 1933 Act, and the Company will take all action that is appropriate or necessary to assure that its offerings of other securities will not be integrated for purposes of the 1933 Act or the rules and regulations of the Principal Market, with the issuance of Securities contemplated hereby.

(z) Reserved.

(aa) Books and Records. The Company will keep proper books of record and account, in which full and correct entries shall be made of all financial transactions and the asset and business of the Company and its Subsidiaries in accordance with GAAP.

(bb) Access to Books and Records. From and after the Closing, the Company shall provide the Lead Buyer and its agents, accountants and advisors with access to the books and records of the Company and to employees of the Company for purposes of complying with any applicable tax, financial reporting or regulatory requirements or any other reasonable business purpose. Unless otherwise consented to in writing by the Lead Buyer, the Company shall not, for a period of seven (7) years following the Closing Date, destroy, alter or otherwise dispose of any of the books and records of the Company for any period prior to the Closing Date without first offering to surrender to the Lead Buyer such books and records or any portion thereof the Company may intend to destroy, alter or dispose of.

(cc) Financial Statements and Monthly Status Reports.

(i) As soon as practicable and in no event later than 30 days after the Closing Date, the Company shall furnish to PharmaCyte, for each quarterly period from January 2022 to March 2024, statements of operations of the Company for such period and for the period beginning at the commencement of the fiscal year and ending at the end of such quarterly period, and a statement of financial condition of the Company as of the end of such quarterly period, setting forth in each case in comparative form figures for the corresponding periods ending in the preceding fiscal year, subject to changes resulting from year-end adjustments.

(ii) From the Closing Date until the date on which no Preferred Shares remain outstanding, the Company shall furnish to PharmaCyte:

i. As soon as practicable and in any event within 25 days after the end of each quarterly period (other than the last quarterly period) in each fiscal year, statements of operations of the Company for such period and for the period beginning at the commencement of the fiscal year and ending at the end of such monthly period, and a statement of financial condition of the Company as of the end of such monthly period, setting forth in each case in comparative form figures for the corresponding periods ending in the preceding fiscal year, subject to changes resulting from year-end adjustments;

ii. Promptly upon receipt thereof, copies of all audit reports submitted to the Company by independent auditors in connection with each annual, interim or special audit of the books of the Company made by such accountants, also to include Form 8-K filings;

iii. As soon as practicable and in any event within five days of mailing and/or filing, copies of all such financial statements and reports as it shall send to its stockholders; and

iv. As soon as practicable and in any event within five days of request, such additional financial data, including copies of all journal entries, as PharmaCyte may reasonably request.

v. As soon as practicable upon request, the Company shall grant PharmaCyte’s auditors access to source documents and will promptly provide the information requested by such auditors, including but not limited to memos supporting the Company’s accounting conclusions.

(iii) The Company shall use its reasonable best efforts, within five days of written notice, (i) to assist PharmaCyte in causing to be prepared in a timely manner any other financial information or statements (including customary pro forma financial statements) that are required to be included in the filings to be made by PharmaCyte with the SEC

or other regulatory authorities in connection with the transactions contemplated by this Agreement and (ii) to obtain the consents of its auditors with respect thereto as may be required by applicable law or requested by the SEC.

(dd) Closing Documents. On or prior to twenty (20) calendar days after the Closing Date, the Company agrees to deliver, or cause to be delivered, to each Buyer and Buyer Counsel a complete closing set of the executed Transaction Documents (which may be delivered in electronic format), Securities and any other document required to be delivered to any party pursuant to Section 7 hereof or otherwise.

(ee) Certificate of Designations. The Company shall have submitted the Certificate of Designations to the Secretary of State of the State of Delaware on or prior to the Closing Date, and shall deliver to each Holder evidence of acceptance thereof by the Secretary of State of the State of Delaware within 30 Business Days after the Closing Date. For the avoidance of doubt, between the Closing Date and the date that the Secretary of State of the State of Delaware accepts the filing of the Certificate of Designations, the Company shall honor all of the terms and conditions of the Certificate of Designations and perform all of its obligations thereunder.

(ff) Board Nomination Right.

- (i) As of the Closing, the Company agrees that the size of the Company's board of directors (the "**Board**") shall be increased from seven (7) members to eight (8) members, and the Company shall use its reasonable best efforts to increase the size of the Board as set forth in this Section 4(ee).
- (ii) As of the Closing, the Lead Buyer shall have the right to appoint or nominate for election to the Board one (1) individual to serve as director of the Company (the individual appointed or nominated by the Lead Buyer for election to the Board pursuant to this Section 4(ee), the "**Nominee**") with the consent of the Company.
- (iii) Until the Investor Board Seat Fall-Away (as defined below), the Company shall take all necessary actions within its control, including but not limited to calling a meeting of the Board or executing an action by unanimous written consent of the Board, such that the Nominee shall be appointed to the Board as a director of the Company.
- (iv) Until the Investor Board Seat Fall-Away, the Company shall take all actions necessary (including, without limitation, calling special meetings of the Board and the stockholders of the Company and recommending, supporting and soliciting proxies) to ensure that: (i) if up for election, the Nominee is included in the slate of nominees to the stockholders of the Company for the election of directors of the Company and recommended by the Board at any meeting of stockholders called for the purpose of electing directors of the Company; and (ii) the Nominee, if up for election, is included in the proxy statement prepared by management of the Company in connection with the Company's solicitation of proxies or consents in favor of the foregoing for every meeting of the stockholders of the Company called with respect to the election of members of the Board, and at every adjournment or postponement thereof, and on every action or approval by written resolution of the stockholders of the Company or the Board with respect to the election of directors of the Company.

(v) Until the Investor Board Seat Fall-Away, if the Nominee ceases to serve for any reason, the Lead Buyer shall be entitled to designate and appoint or nominate such person's successor in accordance with this Agreement with the consent of the Company and the Board shall promptly fill the vacancy with such successor Nominee.

(vi) The Company shall indemnify the Nominee on the same basis as all other members of the Board and pursuant to an indemnity agreement with terms that are no less favorable to the Nominee than the indemnity agreements entered into between the Company and its other non-employee directors. The Company will reimburse the Nominee for all reasonable and documented expenses incurred in connection with the Nominee's participation in meetings of the Board or any committee of the Board, including, without limitation, all reasonable and documented travel, lodging and meal expenses, in each case to the same extent as the Company reimburses any other non-executive member of the Board for such expenses.

(vii) For the purposes of this Section 4(ee), "Investor Board Seat Fall-Away" means the first day on which the Lead Buyer ceases to beneficially own shares of Common Stock that represent, on an as-converted basis, at least 20% of the number of shares of Common Stock outstanding of the Company.

(gg) 10b5-1 Plan. The Company shall reasonably cooperate with the Lead Buyer with respect to any requirements under the Lead Buyer's 10b5-1 sales program with respect to sales of the Company's common stock, including, without limitation, executing reasonable and customary representation letters.

(hh) Limitation on Installment Redemptions. During the period beginning on the Closing Date and ending on September 1, 2024, the Company shall not make any payments in cash to the holders of its Series F Convertible Preferred Stock without the prior written consent of the Lead Buyer.

5. Register; Transfer Agent Instructions; Legend.

(a) Register. The Company shall maintain at its principal executive offices (or such other office or agency of the Company as it may designate by notice to each holder of Securities), a register for the Preferred Shares and the Warrants in which the Company shall record the name and address of the Person in whose name the Preferred Shares and the Warrants have been issued (including the name and address of each transferee), the principal amount of the Preferred Shares held by such Person, the number of Conversion Shares issuable pursuant to the terms of the Preferred Shares and the number of Warrant Shares issuable upon exercise of the Warrants held by such Person. The Company shall keep the register open and available at all times during business hours for inspection of any Buyer or its legal representatives.

(b) Transfer Agent Instructions. On or prior to the Closing Date, the Company shall issue irrevocable instructions to its transfer agent and any subsequent transfer agent (as applicable, the "**Transfer Agent**") in a form acceptable to each of the Buyers (the "**Irrevocable Transfer Agent Instructions**") to issue certificates or credit shares (to the extent unrestricted shares are issued) to the applicable balance accounts at The Depository Trust Company ("**DTC**"), registered in the name of each Buyer or its respective nominee(s), for the Conversion Shares and the Warrant Shares in such amounts as specified from time to time by each Buyer to the Company upon conversion of the Preferred Shares or the exercise of the Warrants (as the case may be). The Company represents and warrants that no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 5(b), and stop transfer instructions to give effect to Section 2(g) hereof, will be given by the Company to its transfer agent with respect to the Securities, and that the Securities shall otherwise be freely transferable on the books and records of the Company, as applicable, to the extent provided in this Agreement and the other Transaction Documents. If a Buyer effects a sale, assignment or transfer of the Securities, the Company shall permit the transfer and shall promptly instruct its transfer agent to issue one or more certificates or credit shares to the applicable balance accounts at DTC in such name and in such denominations as specified by such Buyer to effect such sale, transfer or assignment. In the event that such sale, assignment or transfer involves Conversion Shares or Warrant Shares sold, assigned or transferred pursuant to an effective registration statement or in compliance with Rule 144, the transfer agent shall issue such shares to such Buyer, assignee or transferee (as the case may be) without any restrictive legend. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to a Buyer. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section 5(b) will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section 5(b), that a Buyer shall be entitled, in addition to all other available remedies, to an order and/or injunction restraining any breach and requiring

immediate issuance and transfer, without the necessity of showing economic loss and without any bond or other security being required. The Company shall cause its counsel to issue the legal opinion referred to in the Irrevocable Transfer Agent Instructions to the Company's transfer agent on each Effective Date (as defined in the Registration Rights Agreement). Any fees (with respect to the transfer agent, counsel to the Company or otherwise) associated with the issuance of such opinion or the removal of any legends on any of the Securities shall be borne by the Company.

(c) **Legends.** Each Buyer understands that the Securities have been issued (or will be issued in the case of the Conversion Shares and the Warrant Shares) pursuant to an exemption from registration or qualification under the 1933 Act and applicable state securities laws, and except as set forth below, the Securities shall bear any legend as required by the "blue sky" laws of any state and a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of such stock certificates):

[NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE [CONVERTIBLE] [EXERCISABLE] HAVE BEEN][THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT 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 TO THE HOLDER (IF REQUESTED BY THE COMPANY), IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD OR ELIGIBLE TO BE 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.

(d) **Removal of Legends.** Certificates evidencing Securities shall not be required to contain the legend set forth in Section 5(c) above or any other legend (i) while a registration statement (including a Registration Statement) covering the resale of such Securities is effective under the 1933 Act, (ii) following any sale of such Securities pursuant to Rule 144 (assuming the transferor is not an affiliate of the Company), (iii) if such Securities are eligible to be sold, assigned or transferred under Rule 144 without restriction (provided that a Buyer provides the Company with reasonable assurances that such Securities are eligible for sale, assignment or transfer under Rule 144 without restriction which shall not include an opinion of Buyer's counsel), (iv) in connection with a sale, assignment or other transfer (other than under Rule 144), provided that such Buyer provides the Company with an opinion of counsel to such Buyer, in a generally acceptable form, to the effect that such sale, assignment or transfer of the Securities may be made without registration under the applicable requirements of the 1933 Act and the Securities, as sold, assigned or transferred, need not bear a restrictive legend or (v) if such legend is not required under applicable requirements of the 1933 Act (including, without limitation, controlling judicial interpretations and pronouncements issued by the SEC). If a legend is not required pursuant to the foregoing, the Company shall no later than two (2) Trading Days (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade initiated on the date such Buyer delivers such legended certificate representing such Securities to the Company) following the delivery by a Buyer to the Company or the transfer agent (with notice to the Company) of a legended certificate representing such Securities (endorsed or with stock powers attached, signatures guaranteed, and otherwise in form necessary to affect the reissuance and/or transfer, if applicable), together with any other deliveries from such Buyer as may be required above in this Section 5(d) or as reasonably required by the Company's transfer agent or Company's counsel, as directed by such Buyer, either: (A) provided that the Company's transfer agent is participating in the DTC Fast Automated Securities Transfer Program ("FAST") and such Securities are Conversion Shares or Warrant Shares, credit the aggregate number of shares of Common Stock to which such Buyer shall be entitled to such Buyer's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system or (B) if the Company's transfer agent is not participating in FAST, issue and deliver (via reputable overnight courier) to such Buyer, a certificate representing such Securities that is free from all restrictive and other legends, registered in the name of such Buyer or its designee (the date by which such credit is so required to be made to the balance account of such Buyer's or such Buyer's designee with DTC or such certificate is required to be delivered to such Buyer pursuant to the foregoing is referred to herein as the "**Required Delivery Date**", and the date such shares of Common Stock are actually delivered without restrictive legend to such Buyer or such Buyer's designee with DTC, as applicable, the "**Share Delivery Date**"). The Company shall be responsible for any transfer agent fees or DTC fees with respect to any issuance of Securities or the removal of any legends with respect to any Securities in accordance herewith.

(e) **FAST Compliance.** While any Warrants remain outstanding, the Company shall maintain a transfer agent that participates in FAST.

6. Conditions to the Company's Obligation to Sell.

The obligation of the Company hereunder to issue and sell the Preferred Shares and the related Warrants to each Buyer at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, 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 by providing each Buyer with prior written notice thereof:

(a) Such Buyer shall have executed each of the other Transaction Documents to which it is a party and delivered the same to the Company.

(b) Such Buyer and each other Buyer shall have delivered to the Company the Purchase Price (less, in the case of any Buyer, the amounts withheld pursuant to Section 4(g)) for the Preferred Shares and the related Warrants being purchased by such Buyer at the Closing by wire transfer of immediately available funds in accordance with the wire instructions provided by the Company.

(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 originally made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct as of such 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 statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or Governmental Entity of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

7. Conditions to Each Buyer's Obligation to Purchase.

The obligation of each Buyer hereunder to purchase its Preferred Shares and its related Warrants at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for each Buyer's sole benefit and may be waived by such Buyer at any time in its sole discretion by providing the Company with prior written notice thereof:

(a) The Company and each Subsidiary (as the case may be) shall have duly executed and delivered to such Buyer each of the Transaction Documents to which it is a party and the Company shall have duly delivered to such Buyer (A) such aggregate number of Preferred Shares as is set forth across from such Buyer's name in column (3) of the Schedule of Buyers, (B) a Long-Term Warrant initially exercisable for such aggregate number of Warrant Shares as is set forth across from such Buyer's name in column (4) of the Schedule of Buyers, and (C) a Short-Term Warrant initially exercisable for such aggregate number of Warrant Shares as is set forth across from such Buyer's name in column (5) of the Schedule of Buyers in each case, as being purchased by such Buyer at the Closing pursuant to this Agreement; provided, however, the parties agree that no delay in the acceptance of the Certificate of Designations by the Secretary of State of the State Delaware shall cause the conditions set forth in Section 7(a)(A) to not be satisfied and Section 7(a)(A) shall be deemed satisfied so long as the Certificate of Designations has been submitted to (and not rejected by) the Secretary of State of the State of

Delaware and the Company has given irrevocable instructions to the Transfer Agent to issue the Preferred Shares upon acceptance of the Certificate of Designations by the Secretary of State of the State of Delaware.

(b) Such Buyer shall have received the opinion of Haynes and Boone, LLP, the Company's counsel, dated as of the Closing Date, addressed to each Buyer, in the form acceptable to such Buyer.

(c) The Company shall have delivered to such Buyer a copy of the Irrevocable Transfer Agent Instructions, which instructions shall have been delivered to and acknowledged in writing by the Company's transfer agent.

(d) The Company shall have delivered to such Buyer a certificate evidencing the formation and good standing of the Company in its jurisdiction of formation issued by the Secretary of State (or comparable office) of such jurisdiction of formation as of a date within ten (10) days of the Closing Date.

(e) The Company shall have delivered to such Buyer a certified copy of the Certificate of Incorporation as certified by the Delaware Secretary of State within ten (10) days of the Closing Date.

(f) The Company shall have delivered to such Buyer a certificate, in the form acceptable to such Buyer, executed by the Secretary of the Company and dated as of the Closing Date, as to (i) the resolutions consistent with Section 3(b) as adopted by the Company's board of directors in a form reasonably acceptable to such Buyer, (ii) the Certificate of Incorporation of the Company and (iii) the Bylaws of the Company as in effect at the Closing.

(g) Each and every representation and warranty of the Company shall be true and correct as of the date when made and as of the Closing Date as though originally made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct as of such specific date) and the Company shall have performed, satisfied and complied in all respects with the covenants, agreements and conditions required to be performed, satisfied or complied with by the Company at or prior to the Closing Date. Such Buyer shall have received a certificate, duly executed by the Chief Executive Officer or Chief Financial Officer of the Company, dated as of the Closing Date, to the foregoing effect.

(h) The Company shall have delivered to such Buyer a letter from the Company's transfer agent certifying the number of shares of Common Stock outstanding on the Closing Date immediately prior to the Closing.

(i) The Common Stock (A) shall be designated for quotation or listed (as applicable) on the Principal Market and (B) shall not have been suspended, as of the Closing Date, by the SEC or the Principal Market from trading on the Principal Market nor shall suspension by the SEC or the Principal Market have been threatened, as of the Closing Date, either (I) in writing by the SEC or the Principal Market or (II) by falling below the minimum maintenance requirements of the Principal Market.

(j) The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, necessary for the sale of the Securities, including without limitation, those required by the Principal Market, if any.

(k) No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or Governmental Entity of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

(l) Since the date of execution of this Agreement, no event or series of events shall have occurred that reasonably would have or result in a Material Adverse Effect, provided, however, that the definition of "Material Adverse Effect" for the purpose of this clause (xiv), will not include any change or effect that results from (A) changes in law or interpretations thereof, or regulatory policy or interpretation, by any Governmental Entity so long as such change does not have a disproportionate effect on the Company, (B) changes in applicable accounting rules or principles, including changes in GAAP, so long as such change does not have a disproportionate effect on the Company, (C) changes in general economic conditions, and events or conditions generally affecting the industries in which the Company operates, so long as such change does not have a disproportionate effect on the Company, or (D) national or international hostilities, acts of terror or acts of war.

(m) The Company shall have obtained approval of the Principal Market to list or designate for quotation (as the case may be) the Conversion Shares and the Warrant Shares.

(n) Such Buyer shall have received the wire transfer instructions of the Company.

(o) The Company and its Subsidiaries shall have delivered to such Buyer such other documents, instruments or certificates relating to the transactions contemplated by this Agreement as such Buyer or its counsel may reasonably request.

(p) [Reserved].

8. Termination.

This Agreement may be terminated (i) by the mutual consent of each of the Company and the Buyers, (ii) if the Closing shall not have occurred by May 30, 2024 (provided that no party shall have the right to terminate if they were the proximate cause of the failure to close by such date), or (iii) with respect to a Buyer, if the Company has breached the terms of this Agreement in a manner that would cause the failure of the conditions to closing hereunder to be met (and such breach remains uncured after 30 days' notice). Upon any termination in accordance with this Section 8 by a Buyer, such party shall have the right to terminate its obligations under this Agreement with respect to itself at any time on or after the close of business on such date (without liability of such Buyer to any other party); provided, however, the abandonment of the sale and purchase of the Preferred Shares and Warrants by such Buyer shall be applicable only to such Buyer providing such written notice, provided further that no such termination by any party shall affect any obligation of the Company under this Agreement to reimburse such Buyer for the expenses described in Section 4(g) above. Nothing contained in this Section 8 shall be deemed to release any party from any liability for any breach by such party of the terms and provisions of this Agreement or the other Transaction Documents or to impair the right of any party to compel specific performance by any other party of its obligations under this Agreement or the other Transaction Documents.

9. Miscellaneous.

(a) Governing Law; Jurisdiction; Jury Trial. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or under any of the other Transaction Documents or with any transaction contemplated hereby or thereby, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and

sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to operate to preclude any Buyer from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to such Buyer or to enforce a judgment or other court ruling in favor of such Buyer.

EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR UNDER ANY OTHER TRANSACTION DOCUMENT OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, ANY OTHER TRANSACTION DOCUMENT OR ANY TRANSACTION CONTEMPLATED HEREBY OR THEREBY.

(b) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which 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. In the event that any signature is delivered by facsimile or electronic transmission (including DocuSign and similar) or by an email which contains a portable document format (.pdf) file of an executed signature page, such signature page 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 signature page were an original thereof.

(c) Headings; Gender. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement. Unless the context clearly indicates otherwise, each pronoun herein shall be deemed to include the masculine, feminine, neuter, singular and plural forms thereof. The terms "including," "includes," "include" and words of like import shall be construed broadly as if followed by the words "without limitation." The terms "herein," "hereunder," "hereof" and words of like import refer to this entire Agreement instead of just the provision in which they are found.

(d) Severability; Maximum Payment Amounts. If any provision of this Agreement is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Agreement so long as this Agreement as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s). Notwithstanding anything to the contrary contained in this Agreement or any other Transaction Document (and without implication that the following is required or applicable), it is the intention of the parties that in no event shall amounts and value paid by the Company and/or any of its Subsidiaries (as the case may be), or payable to or received by any of the Buyers, under the Transaction Documents (including without limitation, any amounts that would be characterized as "interest" under applicable law) exceed amounts permitted under any applicable law. Accordingly, if any obligation to pay, payment made to any Buyer, or collection by any Buyer pursuant the Transaction Documents is finally judicially determined to be contrary to any such applicable law, such obligation to pay, payment or collection shall be deemed to have been made by mutual mistake of such Buyer, the Company and its Subsidiaries and such amount shall be deemed to have been adjusted with retroactive effect to the maximum amount or rate of interest, as the case may be, as would not be so prohibited by the applicable law. Such adjustment shall be effected, to the extent necessary, by reducing or refunding, at the option of such Buyer, the amount of interest or any other amounts which would constitute unlawful amounts required to be paid or actually paid to such Buyer under the Transaction Documents. For greater certainty, to the extent that any interest, charges, fees, expenses or other amounts required to be paid to or received by such Buyer under any of the Transaction Documents or related thereto are held to be within the meaning of "interest" or another applicable term to otherwise be violative of applicable law, such amounts shall be pro-rated over the period of time to which they relate.

(e) Entire Agreement; Amendments. This Agreement, the other Transaction Documents and the schedules and exhibits attached hereto and thereto and the instruments referenced herein and therein supersede all other prior oral or written agreements between the Buyers, the Company, its Subsidiaries, their affiliates and Persons acting on their behalf, including, without limitation, any transactions by any Buyer with respect to shares of Common Stock or the Securities, and the other matters contained herein and therein, and this Agreement, the other Transaction Documents, the schedules and exhibits attached hereto and thereto and the instruments referenced herein and therein contain the entire understanding of the parties solely with respect to the matters covered herein and therein; provided, however, nothing contained in this Agreement or any other Transaction Document shall (or shall be deemed to) (i) have any effect on any agreements any Buyer has entered into with, or any instruments any Buyer has received from, the Company or any of its Subsidiaries prior to the date hereof with respect to any prior investment made by such Buyer in the Company or (ii) waive, alter, modify or amend in any respect any obligations of the Company or any of its Subsidiaries, or any rights of or benefits to any Buyer or any other Person, in any agreement entered into prior to the date hereof between or among the Company and/or any of its Subsidiaries and any Buyer, or any instruments any Buyer received from the Company and/or any of its Subsidiaries prior to the date hereof, and all such agreements and instruments shall continue in full force and effect. Except as specifically set forth herein or therein, neither the Company nor any Buyer makes any representation, warranty, covenant or undertaking with respect to such matters. For clarification purposes, the Recitals are part of this Agreement. No provision of this Agreement may be amended other than by an instrument in writing signed by the Company and the Required Holders (as defined below), and any amendment to any provision of this Agreement made in conformity with the provisions of this Section 9(e) shall be binding on all Buyers and holders of Securities, as applicable; provided that no such amendment shall be effective to the extent that it (A) applies to less than all of the holders of the Securities then outstanding or (B) imposes any obligation or liability on any Buyer without such Buyer's prior written consent (which may be granted or withheld in such Buyer's sole discretion). No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party, provided that the Required Holders may waive any provision of this Agreement, and any waiver of any provision of this Agreement made in conformity with the provisions of this Section 9(e) shall be binding on all Buyers and holders of Securities, as applicable, provided that no such waiver shall be effective to the extent that it (1) applies to less than all of the holders of the Securities then outstanding (unless a party gives a waiver as to itself only) or (2) imposes any obligation or liability on any Buyer without such Buyer's prior written consent (which may be granted or withheld in such Buyer's sole discretion). No consideration (other than reimbursement of legal fees) shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of the Transaction Documents unless the same consideration also is offered to all of the parties to the Transaction Documents, all holders of the Preferred Shares or all holders of the Warrants (as the case may be). From the date hereof and while any Preferred Shares or Warrants are outstanding, the Company shall not be permitted to receive any consideration from a Buyer or a holder of Preferred Shares or Warrants that is not otherwise contemplated by the Transaction Documents in order to, directly or indirectly, induce the Company or any Subsidiary (i) to treat such Buyer or holder of Preferred Shares or Warrants in a manner that is more favorable than to other similarly situated Buyers or holders of Preferred Shares or Warrants, as applicable, or (ii) to treat any Buyer(s) or holder(s) of Preferred Shares or Warrants in a manner that is less favorable than the Buyer or holder of Preferred Shares or Warrants that is paying such consideration; provided, however, that the determination of whether a Buyer has been treated more or less favorably than another Buyer shall disregard any securities of the Company purchased or sold by any Buyer. The Company has not directly or indirectly, made any agreements with any Buyers relating to the terms or conditions of the transactions contemplated by the Transaction Documents except as set forth in the Transaction Documents. Without limiting the foregoing, the Company confirms that, except as set forth in this Agreement, no Buyer has made any commitment or promise or has any other obligation to provide any financing to the Company, any Subsidiary or otherwise. As a material inducement for each Buyer to enter into this Agreement, the Company expressly acknowledges and agrees that (x) no due diligence or other investigation or inquiry conducted by a Buyer, any of its advisors or any of its representatives shall affect such Buyer's right to rely on, or shall modify or qualify in any manner or be an exception to any of, the Company's representations and warranties contained in this Agreement or any other Transaction Document and (y) unless a provision of this Agreement or any other Transaction Document is expressly preceded by the phrase "except as disclosed in the SEC Documents," nothing contained in any of the SEC Documents shall affect such Buyer's right to rely on, or shall modify or qualify in any manner or be an exception to any of, Company's representations and warranties contained in this Agreement or any other Transaction Document. "Required Holders" means (I) prior to the Closing Date, each Buyer entitled to purchase, in the aggregate, at least a majority of the number of Preferred Shares at the Closing and (II) on or after the Closing Date, holders of a majority of the Preferred Shares then outstanding.

(f) Notices. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by electronic mail (provided that such sent email is kept on file (whether electronically or otherwise) by the sending party and the sending party does not receive an automatically generated message from the recipient's email server that such email could not be delivered to such recipient); or (iii) one (1) Business Day after deposit with an overnight courier service with next day delivery specified, in each case, properly addressed to the party to receive the same. The mailing addresses and email addresses for such communications shall be:

If to the Company:

MyMD Pharmaceuticals, Inc.
855 N. Wolfe Street, Suite 623
Baltimore, MD 21205
Attention: Christopher C. Chapman
Telephone: (856) 848-8698
Email: ccchapman@mymd.com

With a copy (for informational purposes only) to:

Haynes and Boone, LLP
30 Rockefeller Plaza, 26th Floor
New York, New York 10112
Telephone: (212) 659-7300
Attention: Rick Werner
Email: rick.werner@haynesboone.com

If to the Transfer Agent:

Securities Transfer
N. Dallas Parkway Suite 380
Plano, Texas 75093

If to a Buyer, to its mailing address and email address set forth on the Schedule of Buyers, with copies to such Buyer's representatives as set forth on the Schedule of Buyers,

with a copy (for informational purposes only) to:

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
919 Third Avenue
New York, New York 10022
Telephone: (212) 935-3000
Attention: Kenneth Koch, Esq. and Daniel Bagliebter, Esq.
E-mail: krkoch@mintz.com, dabagliebter@mintz.com

or to such other mailing address and/or email address and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change, provided that Buyer Counsel shall only be provided copies of notices sent to the Lead Buyer. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's email containing the time, date and recipient's email or (C) provided by an overnight courier service shall be rebuttable evidence of personal service, receipt by email or receipt from an overnight courier service in accordance with clause (i), (ii) or (iii) above, respectively.

(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns, including any purchasers of any of the Preferred Shares and Warrants. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Required Holders, including, without limitation, by way of a Fundamental Transaction (as defined in the Warrants) (unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Warrants) or a Fundamental Transaction (as defined in the Certificate of Designations) (unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Certificate of Designations). A Buyer may assign some or all of its rights hereunder in connection with any transfer of any of its Securities without the consent of the Company, in which event such assignee shall be deemed to be a Buyer hereunder with respect to such assigned rights.

(h) No 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, other than the Indemnitees referred to in Section 9(k) and the Placement Agents.

(i) Survival. The representations, warranties, agreements and covenants shall survive the Closing. Each Buyer shall be responsible only for its own representations, warranties, agreements and covenants hereunder.

(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 any 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) Indemnification. In consideration of each Buyer's execution and delivery of the Transaction Documents and acquiring the Securities thereunder and in addition to all of the Company's other obligations under the Transaction Documents, the Company shall defend, protect, indemnify and hold harmless each Buyer and each holder of any Securities and all of their 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 (i) any misrepresentation or breach of any representation or warranty made by the Company or any Subsidiary in any of the Transaction Documents, (ii) any breach of any covenant, agreement or obligation of the Company or any Subsidiary contained in any of the Transaction Documents or (iii) any cause of action, suit, proceeding 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 or any Subsidiary) or which otherwise involves such Indemnitee that arises out of or results from (A) the execution, delivery, performance or enforcement of any of the Transaction Documents, (B) any transaction financed or to be financed in whole or in part, directly or indirectly, with the

proceeds of the issuance of the Securities, (C) any disclosure properly made by such Buyer pursuant to Section 4(i), or (D) the status of such Buyer or holder of the Securities either as an investor in the Company pursuant to the transactions contemplated by the Transaction Documents or as a party to this Agreement (including, without limitation, as a party in interest or otherwise in any action or proceeding for injunctive or other equitable relief). 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 which is permissible under applicable law. Except as otherwise set forth herein, the mechanics and procedures with respect to the rights and obligations under this Section 9(k) shall be the same as those set forth in Section 6 of the Registration Rights Agreement.

(l) 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. No specific representation or warranty shall limit the generality or applicability of a more general representation or warranty. Each and every reference to share prices, shares of Common Stock and any other numbers in this Agreement that relate to the shares of Common Stock shall be automatically adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions that occur with respect to the Common Stock after the date of this Agreement. Notwithstanding anything in this Agreement to the contrary, for the avoidance of doubt, nothing contained herein shall constitute a representation or warranty against, or a prohibition of, any actions with respect to the borrowing of, arrangement to borrow, identification of the availability of, and/or securing of, securities of the Company in order for such Buyer (or its broker or other financial representative) to effect short sales or similar transactions in the future.

(m) Remedies. Each Buyer and in the event of assignment by Buyer of its rights and obligations hereunder, each holder of Securities, shall have all rights and remedies set forth in the Transaction Documents and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which such holders have under any law. Any Person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any breach of any provision of this Agreement and to exercise all other rights granted by law. Furthermore, the Company recognizes that in the event that it or any Subsidiary fails to perform, observe, or discharge any or all of its or such Subsidiary's (as the case may be) obligations under the Transaction Documents, any remedy at law would be inadequate relief to the Buyers. The Company therefore agrees that the Buyers shall be entitled to specific performance and/or temporary, preliminary and permanent injunctive or other equitable relief from any court of competent jurisdiction in any such case without the necessity of proving actual damages and without posting a bond or other security. The remedies provided in this Agreement and the other Transaction Documents shall be cumulative and in addition to all other remedies available under this Agreement and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief).

(n) Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) the Transaction Documents, whenever any Buyer exercises a right, election, demand or option under a Transaction Document and the Company or any Subsidiary does not timely perform its related obligations within the periods therein provided, then such Buyer may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company or such Subsidiary (as the case may be), any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights.

(o) Payment Set Aside: Currency. To the extent that the Company makes a payment or payments to any Buyer hereunder or pursuant to any of the other Transaction Documents or any of the Buyers enforce or exercise their rights hereunder or thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, foreign, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred. Unless otherwise expressly indicated, all dollar amounts referred to in this Agreement and the other Transaction Documents are in United States Dollars (“**U.S. Dollars**”), and all amounts owing under this Agreement and all other Transaction Documents shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. “Exchange Rate” means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Agreement, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation.

(p) Judgment Currency.

- a. If for the purpose of obtaining or enforcing judgment against the Company in connection with this Agreement or any other Transaction Document in any court in any jurisdiction it becomes necessary to convert into any other currency (such other currency being hereinafter in this Section 9(p) referred to as the “**Judgment Currency**”) an amount due in US Dollars under this Agreement, the conversion shall be made at the Exchange Rate prevailing on the Trading Day immediately preceding:
 - i. the date actual payment of the amount due, in the case of any proceeding in the courts of New York or in the courts of any other jurisdiction that will give effect to such conversion being made on such date: or
 - ii. the date on which the foreign court determines, in the case of any proceeding in the courts of any other jurisdiction (the date as of which such conversion is made pursuant to this Section 9(p)(i)(2) being hereinafter referred to as the “**Judgment Conversion Date**”).
- b. If in the case of any proceeding in the court of any jurisdiction referred to in Section 9(p)(i)(2) above, there is a change in the Exchange Rate prevailing between the Judgment Conversion Date and the date of actual payment of the amount due, the applicable party shall pay such adjusted amount as may be necessary to ensure that the amount paid in the Judgment Currency, when converted at the Exchange Rate prevailing on the date of payment, will produce the amount of US Dollars which could have been purchased with the amount of Judgment Currency stipulated in the judgment or judicial order at the Exchange Rate prevailing on the Judgment Conversion Date.
- c. Any amount due from the Company under this provision shall be due as a separate debt and shall not be affected by judgment being obtained for any other amounts due under or in respect of this Agreement or any other Transaction Document.

(q) Independent Nature of Buyers' Obligations and Rights. The obligations of each Buyer under the Transaction Documents are several and not joint with the obligations of any other Buyer, and no Buyer shall be responsible in any way for the performance of the obligations of any other Buyer under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Buyer pursuant hereto or thereto, shall be deemed to constitute the Buyers as, and the Company each acknowledge that the Buyers do not so constitute, a partnership, an association, a joint venture or any other kind of group or entity, or create a presumption that the Buyers are in any way acting in concert or as a group or entity, and the Company shall not assert any such claim with respect to such obligations or the transactions contemplated by the Transaction Documents or any matters, and the Company acknowledges that the Buyers are not acting in concert or as a group, and the Company shall not assert any such claim, with respect to such obligations or the transactions contemplated by the Transaction Documents. The decision of each Buyer to purchase Securities pursuant to the Transaction Documents has been made by such Buyer independently of any other Buyer. Each Buyer acknowledges that no other Buyer has acted as agent for such Buyer in connection with such Buyer making its investment hereunder and that no other Buyer will be acting as agent of such Buyer in connection with monitoring such Buyer's investment in the Securities or enforcing its rights under the Transaction Documents. The Company and each Buyer confirms that each Buyer has independently participated with the Company and its Subsidiaries in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Buyer shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of any other Transaction Documents, and it shall not be necessary for any other Buyer to be joined as an additional party in any proceeding for such purpose. The use of a single agreement to effectuate the purchase and

sale of the Securities contemplated hereby was solely in the control of the Company, not the action or decision of any Buyer, and was done solely for the convenience of the Company and its Subsidiaries and not because it was required or requested to do so by any Buyer. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company, each Subsidiary and a Buyer, solely, and not between the Company, its Subsidiaries and the Buyers collectively and not between and among the Buyers.

[Signature pages follow.]

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Agreement to be duly executed as of the date first written above.

COMPANY:

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Agreement to be duly executed as of the date first written above.

BUYER:

Name:
Title:

SCHEDULE OF BUYERS

SECURITIES PURCHASE AGREEMENT

This SECURITIES PURCHASE AGREEMENT (the “**Agreement**”), dated as of May 20, 2024, is by and among MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), and each of the investors listed on the Schedule of Buyers attached hereto (individually, a “**Buyer**” and collectively, the “**Buyers**”).

RECITALS

- A. The Company and each Buyer is executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “1933 Act”), and Rule 506(b) of Regulation D (“Regulation D”) as promulgated by the United States Securities and Exchange Commission (the “SEC”) under the 1933 Act.
- B. The Company has authorized, subject to acceptance of the Certificate of Designations (as defined below) by the Secretary of State of the State of Delaware, a new series of convertible preferred stock of the Company, designated as Series F-1 Convertible Preferred Stock, par value \$0.001 per share, the terms of which are set forth in the certificate of designations for such series of preferred stock (the “Certificate of Designations”) in the form attached hereto as Exhibit A (together with any convertible preferred shares issued in replacement thereof in accordance with the terms thereof, the “Series F-1 Preferred Stock”), which Series F-1 Preferred Stock shall be convertible into shares of common stock of the Company, par value \$0.001 per share (“Common Stock”) (such shares of Common Stock issuable pursuant to the terms of the Certificate of Designations, including, without limitation, upon conversion or otherwise, collectively, the “Conversion Shares”), in accordance with the terms of the Certificate of Designations.
- C. Each Buyer wishes to purchase, and the Company wishes to sell, upon the terms and conditions stated in this Agreement (i) such aggregate number of shares of Series F-1 Preferred Stock set forth opposite such Buyer’s name in column (3) on the Schedule of Buyers (which aggregate amount for all Buyers shall be 5,050 Preferred Shares and shall be referred to herein as the “Preferred Shares”), (ii) a warrant to initially acquire up to that aggregate number of additional shares of Common Stock set forth opposite such Buyer’s name in column (4) on the Schedule of Buyers, substantially in the form attached hereto as Exhibit B (the “Long-Term Warrants”), and (iii) a warrant to initially acquire up to that aggregate number of additional shares of Common Stock set forth opposite such Buyer’s name in column (5) on the Schedule of Buyers, substantially in the form attached hereto as Exhibit C (the “Short-Term Warrants,” and collectively, with the Long-Term Warrants, the “Warrants”) (the shares issuable upon exercise of the Warrants, the “Warrant Shares”).
- D. The parties hereto shall execute and deliver a Registration Rights Agreement, in the form attached hereto as Exhibit D (the “Registration Rights Agreement”), pursuant to which the Company has agreed to provide certain registration rights with respect to the Registrable Securities (as defined in the Registration Rights Agreement), under the 1933 Act and the rules and regulations promulgated thereunder, and applicable state securities laws.
- E. The Preferred Shares, the Conversion Shares, the Warrants and the Warrant Shares are collectively referred to herein as the “Securities.”

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and each Buyer hereby agree as follows:

1. Purchase and Sale of Preferred Shares and Warrants.

(a) Purchase of Preferred Shares and Warrants. Subject to the satisfaction (or waiver) of the conditions set forth in Sections 6 and 7 below, the Company shall issue and sell to each Buyer, and each Buyer severally, but not jointly, agrees to purchase from the Company on the Closing Date (as defined below), such aggregate number of Preferred Shares as is set forth opposite such Buyer’s name in column (3) on the Schedule of Buyers along with Long-Term Warrants to initially acquire up to that aggregate number of Warrant Shares as is set forth opposite such Buyer’s name in column (4) on the Schedule of Buyers and Short-Term Warrants to initially acquire up to that aggregate number of Warrant Shares as is set forth opposite such Buyer’s name in column (5) on the Schedule of Buyers.

(b) Closing. The closing (the “Closing”) of the purchase of the Preferred Shares and the Warrants by the Buyers shall occur remotely by the electronic transfer of Closing documentation. The date and time of the Closing (the “Closing Date”) shall be 10:00 a.m., New York time, on the first (1st) Business Day on which the conditions to the Closing set forth in Sections 6 and 7 below are satisfied or waived (or such other date as is mutually agreed to by the Company and each Buyer). As used herein, “Business Day” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(c) Purchase Price. The aggregate purchase price for the Preferred Shares and the Warrants to be purchased by each Buyer (the “Purchase Price”) shall be the amount set forth opposite such Buyer’s name in column (6) on the Schedule of Buyers.

(d) Form of Payment. On the Closing Date, (i) each Buyer shall pay its respective Purchase Price (less, in the case of the lead buyer, the amounts withheld pursuant to Section 4(h)) to the Company for the Preferred Shares and the Warrants to be issued and sold to such Buyer at the Closing, by wire transfer of immediately available funds in accordance with the Company’s written wire instructions (less, in the case of the lead buyer, the amounts withheld pursuant to Section 4(h)) and (ii) the Company shall deliver to each Buyer (A) such aggregate number of Preferred Shares as is set forth opposite such Buyer’s name in column (3) of the Schedule of Buyers, (B) a Long-Term Warrant pursuant to which such Buyer shall have the right to initially acquire up to such aggregate number of Warrant Shares as is set forth opposite such Buyer’s name in column (4) of the Schedule of Buyers and (C) a Short-Term Warrant pursuant to which such Buyer shall have the right to initially acquire up to such aggregate number of Warrant Shares as is set forth opposite such Buyer’s name in column (5) of the Schedule of Buyers, in each case, duly executed on behalf of the Company and registered in the name of such Buyer or its designee.

2. Buyer’s Representations and Warranties.

Each Buyer, severally and not jointly, represents and warrants to the Company with respect to only itself that, as of the date hereof and as of the Closing Date:

(a) Organization: Authority. Such Buyer is an entity duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization with the requisite power and authority to enter into and to consummate the transactions contemplated by the Transaction Documents (as defined below) to which it is a party and otherwise to carry out its obligations hereunder and thereunder.

(b) No Public Sale or Distribution. Such Buyer (i) is acquiring its Preferred Shares and Warrants, (ii) upon conversion of its Preferred Shares will acquire the Conversion Shares issuable upon conversion thereof, and (iii) upon exercise of its Warrants (other than pursuant to a Cashless Exercise (as defined in the Warrants)) will acquire the Warrant Shares issuable upon exercise thereof, in each case, 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 laws, except pursuant to sales registered or exempted under the 1933 Act; provided, however, by making the representations herein, such Buyer does not agree, or make any representation or warranty, 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 from registration under the 1933 Act and in accordance with the terms of the Securities. Such Buyer does not presently have any agreement or understanding, directly or indirectly, with any Person to distribute any of the Securities in violation of applicable securities laws. For purposes of this Agreement, "Person" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any Governmental Entity (as defined below) or any department or agency thereof.

(c) Accredited Investor Status; Experience. Such Buyer is an "accredited investor" as that term is defined in Rule 501(a) of Regulation D. Such Buyer, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. Such Buyer is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(d) Reliance on Exemptions. Such Buyer understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Buyer's compliance with, the representations, warranties, agreements, acknowledgments and understandings of such Buyer set forth herein in order to determine the availability of such exemptions and the eligibility of such Buyer to acquire the Securities.

(e) Information. Such Buyer acknowledges that it has had the opportunity to review the Transaction Documents (including all exhibits and schedules thereto) and the SEC Documents (as defined below). Such Buyer and its advisors, if any, have been 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 that have been requested by such Buyer. Such Buyer and its advisors, if any, have been afforded the opportunity to ask questions of the Company. Neither such inquiries nor any other due diligence investigations conducted by such Buyer or its advisors, if any, or its representatives shall modify, amend or affect such Buyer's right to rely on the Company's representations and warranties contained herein. Such Buyer understands that its investment in the Securities involves a high degree of risk. Such Buyer has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities.

(f) No Governmental Review. Such Buyer understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

(g) Transfer or Resale. Such Buyer understands that except as provided in the Registration Rights Agreement and herein: (i) the Securities have not been and are not being registered under the 1933 Act or any state securities laws, and may not be offered for sale, sold, assigned or transferred unless (A) subsequently registered thereunder, (B) such Buyer shall have delivered to the Company (if requested by the Company) an opinion of counsel, in a form reasonably acceptable to the Company, to the effect that such Securities to be sold, assigned or transferred may be sold, assigned or transferred pursuant to an exemption from such registration, or (C) such Buyer provides the Company with reasonable assurance that such Securities can be sold, assigned or transferred pursuant to Rule 144 or Rule 144A promulgated under the 1933 Act (or a successor rule thereto) (collectively, "Rule 144"); (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144, and further, if Rule 144 is not applicable, any resale of the 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 promulgated thereunder; and (iii) 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. 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 and such pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Buyer effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document (as defined in Section 3(b)), including, without limitation, this Section 2(g).

(h) Validity; Enforcement. This Agreement and the Registration Rights Agreement have been duly and validly authorized, executed and delivered on behalf of such Buyer and shall constitute the legal, valid and binding obligations of such Buyer enforceable against such Buyer in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.

(i) No Conflicts. The execution, delivery and performance by such Buyer of this Agreement and the Registration Rights Agreement and the consummation by such Buyer of the transactions contemplated hereby and thereby will not (i) result in a violation of the organizational documents of such Buyer, or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which such Buyer is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws) applicable to such Buyer, except in the case of clauses (ii) and (iii) above, for such conflicts, defaults, rights or violations which could not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the ability of such Buyer to perform its obligations hereunder.

(j) No Reliance on Placement Agents. Such Buyer acknowledges and agrees that neither the Placement Agents (as defined below) nor any affiliate of the Placement Agents has provided such Buyer with any information or advice with respect to the Securities nor is such information or advice necessary or desired. Neither the Placement Agents nor any affiliate has made or makes any representation as to the Company or the quality of the Securities and the Placement Agents and any affiliate may have acquired non-public information with respect to the Company which such Buyer agrees need not be provided to it. In connection with the issuance of the Securities to such Buyer, neither the Placement Agents nor any of its affiliates has acted as a financial advisor or fiduciary to such Buyer.

(k) Residency. Such Buyer is a resident of that jurisdiction specified below its address on the Schedule of Buyers.

(l) General Solicitation. Buyer represents that, to the knowledge of such Buyer, no Securities were offered or sold to it by means of any form of general solicitation, and Buyer is not, to such Buyer's knowledge, purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or, to the knowledge of such Buyer, any other general solicitation or general advertisement.

(m) Certain Transactions and Confidentiality. Other than consummating the transactions contemplated hereunder, such Buyer has not, nor has any Person acting on behalf of or pursuant to any understanding with such Buyer, directly or indirectly executed any purchases or sales, including Short Sales, of the securities of the Company during the period commencing as of the time that such Buyer first received a term sheet (written or oral) from the Company or any other Person representing the Company setting forth the material terms of the transactions contemplated hereunder and ending immediately prior to the execution hereof. Notwithstanding the foregoing, in the case of a Buyer that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Buyer's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Buyer's assets, the representation set forth above shall only apply with

respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement. Other than to other Persons party to this Agreement or to such Buyer's representatives, including, without limitation, its officers, directors, partners, legal and other advisors, employees, agents and affiliates, such Buyer has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction). Notwithstanding the foregoing, for the avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to locating or borrowing shares in order to effect Short Sales or similar transactions in the future. "Short Sales" means all "short sales" as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include locating and/or borrowing shares of Common Stock).

(n) **Bad Actor.** The Buyer represents, after reasonable inquiry, that none of the "Bad Actor" disqualifying events described in Rule 506(d)(1)(i) to (viii) under the 1933 Act (a "Disqualification Event") is applicable to the Buyer or any of its Rule 506(d) Related Parties (if any). "Rule 506(d) Related Party" means a person or entity that is a beneficial owner of the Buyer's securities for purposes of Rule 506(d).

3. Representations and Warranties of the Company.

The Company represents and warrants to each of the Buyers that, as of the date hereof and as of the Closing Date:

(a) **Organization and Qualification.** Each of the Company and each of its Subsidiaries are entities duly organized and validly existing and in good standing under the laws of the jurisdiction in which they are formed, and have the requisite power and authority to own their properties and to carry on their business as described in the SEC Documents. Each of the Company and each of its Subsidiaries is duly qualified as a foreign entity to do business and is in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not reasonably be expected to have a Material Adverse Effect (as defined below). As used in this Agreement, "Material Adverse Effect" means any material adverse effect on (i) the business, properties, assets, liabilities, operations (including results thereof), condition (financial or otherwise) or prospects of the Company and its Subsidiaries (as defined below), taken as a whole, (ii) the transactions contemplated hereby or in any of the other Transaction Documents or any other agreements or instruments to be entered into in connection herewith or therewith or (iii) the authority or ability of the Company or any of its Subsidiaries to perform any of their respective obligations under any of the Transaction Documents (as defined below). The Company has no Subsidiaries. "Subsidiaries" means any Person in which the Company, directly or indirectly, (I) owns any of the outstanding capital stock or holds any equity or similar interest of such Person or (II) controls or operates all or any part of the business, operations or administration of such Person, and each of the foregoing, is individually referred to herein as a "Subsidiary."

(b) **Authorization; Enforcement; Validity.** The Company has the requisite power and authority to enter into and perform its obligations under this Agreement and the other Transaction Documents and to issue the Securities in accordance with the terms hereof and thereof. Each Subsidiary has the requisite power and authority to enter into and perform its obligations under the Transaction Documents to which it is a party. The execution and delivery of this Agreement and the other Transaction Documents by the Company and its Subsidiaries, and the consummation by the Company and its Subsidiaries of the transactions contemplated hereby and thereby (including, without limitation, the issuance by the Company of the Preferred Shares and the reservation for issuance and issuance of the Conversion Shares issuable upon conversion of the Preferred Shares and the issuance of the Warrants and the reservation for issuance and issuance of the Warrant Shares issuable upon exercise of the Warrants) have been duly authorized by the Company's board of directors and, to the extent applicable, each of its Subsidiaries' board of directors or other governing body, as applicable, and (other than the filing with the SEC of a Form D or one or more Registration Statements in accordance with the requirements of the Registration Rights Agreement, the filing of the Certificate of Designations and the acceptance thereof by the Secretary of State of the State of Delaware, and any other filings as may be required by any state securities agencies) no further filing, consent or authorization is required by the Company, its Subsidiaries, their respective boards of directors or their stockholders or other governing body. This Agreement has been, and the other Transaction Documents to which it is a party will be prior to the Closing, duly executed and delivered by the Company, and each constitutes the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with its respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies and except as rights to indemnification and to contribution may be limited by federal or state securities law. Prior to the Closing, the Transaction Documents to which each Subsidiary is a party will be duly executed and delivered by each such Subsidiary, and shall constitute the legal, valid and binding obligations of each such Subsidiary, enforceable against each such Subsidiary in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies and except as rights to indemnification and to contribution may be limited by federal or state securities law. "Transaction Documents" means, collectively, this Agreement, the Certificate of Designations, the Registration Rights Agreement, the Warrants, the Irrevocable Transfer Agent Instructions (as defined below) and each of the other agreements and instruments entered into or delivered by the Company or any of its Subsidiaries in connection with the transactions contemplated hereby and thereby, as may be amended from time to time.

(c) **Issuance of Securities.** The issuance of the Preferred Shares, subject to the acceptance of the Certificate of Designations by the Secretary of State of the State of Delaware, and the Warrants are duly authorized and upon issuance in accordance with the terms of the Transaction Documents shall be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, mortgages, defects, claims, liens, pledges, charges, taxes, rights of first refusal, encumbrances, security interests and other encumbrances (collectively "Liens") with respect to the issuance thereof. As of the Closing, the Company shall have reserved from its duly authorized share capital not less than the sum of (i) 150% of the maximum number of Conversion Shares issuable upon conversion of the Preferred Shares (assuming for purposes hereof that the Preferred Shares are convertible at the closing price of the Common Stock on the day on which the Principal Market (as defined below) is open for trading (a "Trading Day") immediately prior to Closing and without taking into account any limitations on the conversion of the Preferred Shares set forth in the Certificate of Designations), and (ii) the maximum number of Warrant Shares initially issuable upon exercise of the Warrants (without taking into account any limitations on the exercise of the Warrants set forth therein). Upon issuance or conversion in accordance with the Preferred Shares or exercise in accordance with the Warrants (as the case may be), the Conversion Shares and the Warrant Shares, respectively, when issued, will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights or Liens with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of shares of Common Stock (other than restrictions on transfer as described in Section 2(g)). Subject to the accuracy of the representations and warranties of the Buyers in this Agreement, the offer and issuance by the Company of the Securities is exempt from registration under the 1933 Act.

(d) **No Conflicts.** The execution, delivery and performance of the Transaction Documents by the Company and its Subsidiaries and the consummation by the Company and its Subsidiaries of the transactions contemplated hereby and thereby (including, without limitation, the issuance of the Preferred Shares, the Warrants, the Conversion Shares and the Warrant Shares and the reservation for issuance of the Conversion Shares and the Warrant Shares) will not (i) result in a violation of the Company's Certificate of Incorporation, as amended and as in effect on the date hereof (the "Certificate of Incorporation"), and the Company's bylaws, as amended and as in effect on the date hereof (the "Bylaws") or other organizational documents of the Company or any of its Subsidiaries, or any capital stock or other securities of the Company or any of its Subsidiaries, (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) in any respect under, or 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 (iii) result in a violation of any law, rule, regulation, order, judgment or decree and including all applicable foreign, federal and state securities laws, rules and regulations, and the rules and regulations of The Nasdaq Capital Market (the "Principal Market") 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 in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) **Consents.** Neither the Company nor any Subsidiary is required to obtain any consent from, authorization or order of, or make any filing or registration with (other than the filing with the SEC of a Form D or one or more Registration Statements in accordance with the requirements of the Registration Rights Agreement, any other filings as may be required by any state securities agencies, the notice and/or application(s) to the Principal Market for the issuance and sale of the Securities and the listing of the

Conversion Shares and Warrant Shares for trading thereon in the time and manner required thereby and the acceptance of the Certificate of Designations by the Secretary of State of the State of Delaware), any Governmental Entity (as defined below) or any regulatory or self-regulatory agency or any other Person in order for it to execute, deliver or perform any of its respective obligations under or contemplated by the Transaction Documents, in each case, in accordance with the terms hereof or thereof. All consents, authorizations, orders, filings and registrations which the Company or any Subsidiary is required to obtain prior to the Closing Date pursuant to the preceding sentence have been or will be obtained or effected on or prior to the Closing Date, and neither the Company nor any of its Subsidiaries are aware of any facts or circumstances which might prevent the Company or any of its Subsidiaries from obtaining or effecting any of the registration, application or filings contemplated by the Transaction Documents. The Company is not in violation of the requirements of the Principal Market and has no knowledge of any facts or circumstances which could reasonably lead to delisting or suspension of the Common Stock in the foreseeable future. "Governmental Entity" means any nation, state, county, city, town, village, district, or other political jurisdiction of any nature, federal, state, local, municipal, foreign, or other government, governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal), multi-national organization or body; or body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature or instrumentality of any of the foregoing, including any entity or enterprise owned or controlled by a government or a public international organization or any of the foregoing.

(f) Acknowledgment Regarding Buyer's Purchase of Securities. The Company acknowledges and agrees that each Buyer is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated hereby and thereby and that no Buyer is (i) an officer or director of the Company or any of its Subsidiaries, (ii) an "affiliate" (as defined in Rule 144 or Rule 144A promulgated under the 1933 Act (or a successor rule thereto) (collectively, "Rule 144")) of the Company or any of its Subsidiaries or (iii) to its knowledge, a "beneficial owner" of more than 10% of the shares of Common Stock (as defined for purposes of Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the "1934 Act")). The Company further acknowledges that no Buyer is acting as a financial advisor or fiduciary of the Company or any of its Subsidiaries (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby, and any advice given by a Buyer or any of its representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to such Buyer's purchase of the Securities. The Company further represents to each Buyer that the Company's and each Subsidiary's decision to enter into the Transaction Documents to which it is a party has been based solely on the independent evaluation by the Company, each Subsidiary and their respective representatives.

(g) Placement Agent's Fees. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, or brokers' commissions (other than for Persons engaged by any Buyer or its investment advisor) relating to or arising out of the transactions contemplated hereby, including, without limitation, the advisory fees payable to Palladium Capital Group, LLC and GP Nurmenkari Inc. (the "Placement Agents") in connection with the sale of the Securities. The Company shall pay, and hold each Buyer harmless against, any liability, loss or expense (including, without limitation, attorney's fees and out-of-pocket expenses) arising in connection with any such claim. The Company acknowledges that it has engaged the Placement Agents in connection with the sale of the Securities. Other than the Placement Agents, neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the offer or sale of the Securities.

(h) No Integrated Offering. None of the Company, its Subsidiaries or any of their affiliates, nor any Person acting on their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of the issuance of any of the Securities under the 1933 Act, whether through integration with prior offerings or otherwise, or caused this offering of the Securities to require approval of stockholders of the Company for purposes of the 1933 Act or under any applicable stockholder approval provisions, including, without limitation, under the rules and regulations of any exchange or automated quotation system on which any of the securities of the Company are listed or designated for quotation. None of the Company, its Subsidiaries, their affiliates nor any Person acting on their behalf will take any action or steps that would require registration of the issuance of any of the Securities under the 1933 Act (other than pursuant to the Registration Rights Agreement) or cause the offering of any of the Securities to be integrated with other offerings of securities of the Company.

(i) Dilutive Effect. The Company understands and acknowledges that the number of Conversion Shares and Warrant Shares will increase in certain circumstances. The Company further acknowledges that its obligation to issue the Conversion Shares pursuant to the terms of the Certificate of Designations in accordance with this Agreement and Warrant Shares upon exercise of the Warrants in accordance with this Agreement, the Preferred Shares and the Warrants is, in each case, absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other stockholders of the Company.

(j) Application of Takeover Protections: Rights Agreement. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, interested stockholder, business combination, poison pill (including, without limitation, any distribution under a rights agreement), stockholder rights plan or other similar anti-takeover provision under the Certificate of Incorporation, Bylaws or other organizational documents or the laws of the jurisdiction of its incorporation or otherwise which is or could become applicable to any Buyer as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and any Buyer's ownership of the Securities. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any stockholder rights plan or similar arrangement relating to accumulations of beneficial ownership of shares of Common Stock or a change in control of the Company or any of its Subsidiaries.

(k) SEC Documents; Financial Statements. During the two (2) years prior to the date hereof, the Company has timely filed all reports, schedules, forms, proxy statements, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the 1934 Act (all of the foregoing filed prior to the date hereof and all exhibits and appendices included therein and financial statements, notes and schedules thereto and documents incorporated by reference therein being hereinafter referred to as the "SEC Documents"). The Company has delivered or has made available to the Buyers or their respective representatives true, correct and complete copies of each of the SEC Documents not available on the EDGAR system. 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 the light of the circumstances under which they were made, not misleading. As of their respective dates, the financial statements of the Company included in the SEC Documents complied in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto as in effect as of the time of filing. Such financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"), consistently applied, during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments which will not be material, either individually or in the aggregate). No other information provided by or on behalf of the Company to any of the Buyers which is not included in the SEC Documents (including, without limitation, information referred to in Section 2(e) of this Agreement or in the disclosure schedules to this Agreement) contains any untrue statement of a material fact or omits to state any material fact necessary in order to make the statements therein not misleading, in the light of the circumstance under which they are or were made. The Company is not currently contemplating to amend or restate any of the financial statements (including, without limitation, any notes or any letter of the independent accountants of the Company with respect thereto) included in the SEC Documents (the "Financial Statements"), nor is the Company currently aware of facts or circumstances which would require the Company to amend or restate any of the Financial Statements, in each case, in order for any of the Financials Statements to be in compliance with GAAP and the rules and regulations of the SEC. The Company has not been informed by its independent accountants that they recommend that the Company amend or restate any of the Financial Statements or that there is any need for the Company to amend or restate any of the Financial Statements.

(l) Absence of Certain Changes. Except as disclosed in the SEC Documents, since the date of the Company's most recent audited financial statements contained in a Form 10-K, there has been no material adverse change and no material adverse development in the business, assets, liabilities, properties, operations (including results thereof), condition (financial or otherwise) or prospects of the Company or any of its Subsidiaries. Since the date of the Company's most recent audited financial statements contained in a Form 10-K, neither the Company nor any of its Subsidiaries has (i) declared or paid any dividends, (ii) sold any assets, individually or in the aggregate, outside of the ordinary course of business or (iii) made any capital expenditures, individually or in the aggregate, outside of the ordinary course of business. Neither the Company nor any of its Subsidiaries has taken any steps to seek protection pursuant to any law or statute relating to bankruptcy, insolvency, reorganization, receivership, liquidation or winding up, nor does the Company or any Subsidiary have any knowledge or reason to believe that any of their respective creditors intend to initiate involuntary bankruptcy proceedings or any actual knowledge of any fact which would reasonably lead a creditor to do so. The Company and its Subsidiaries, individually and on a consolidated basis, are not as of the date hereof, and after giving effect to the transactions contemplated hereby to occur at the Closing, will not be Company Insolvent (as defined below). For purposes of this Section 3(l), "Company Insolvent" means, with respect to the Company and its Subsidiaries, on a consolidated basis, (A) the present fair saleable value of the Company's and its Subsidiaries' assets is less than the amount required to pay the Company's and its Subsidiaries' total Indebtedness (as defined below), (B) the Company and its Subsidiaries are unable to pay their debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured or (C) the Company and its Subsidiaries intend to incur or believe that they will incur debts that would be beyond their ability to pay as such debts mature. Neither the Company nor any of its Subsidiaries has engaged in any business or in any transaction, and is not about to engage in any business or in any transaction, for which the Company's or such Subsidiary's remaining assets constitute unreasonably small capital with which to conduct the business in which it is engaged as such business is now conducted and is proposed to be conducted.

(m) No Undisclosed Events, Liabilities, Developments or Circumstances. To the Company's knowledge, no event, liability, development or circumstance has occurred or exists that is reasonably likely to have a Material Adverse Effect.

(n) Conduct of Business; Regulatory Permits. Neither the Company nor any of its Subsidiaries is in violation of any term of or in default under its Certificate of Incorporation, organizational documents, any certificate of designations, preferences or rights of any other outstanding series of preferred stock of the Company or any of its Subsidiaries or Bylaws, their organizational charter, certificate of formation, memorandum of association, articles of association or certificate of incorporation or bylaws or other organizational documents, respectively. Neither the Company nor any of its Subsidiaries is in violation of any judgment, decree or order or any statute, ordinance, rule or regulation applicable to the Company or any of its Subsidiaries, and neither the Company nor any of its Subsidiaries will conduct its business in violation of any of the foregoing, except in all cases for possible violations which could not, individually or in the aggregate, have a Material Adverse Effect. Without limiting the generality of the foregoing, the Company is not in violation of any of the rules, regulations or requirements of the Principal Market and has no knowledge of any facts or circumstances that could reasonably lead to delisting or suspension of the Common Stock by the Principal Market in the foreseeable future. Since April 19, 2021, (i) the Common Stock has been listed or designated for quotation on the Principal Market, (ii) trading in the Common Stock has not been suspended by the SEC or the Principal Market and (iii) the Company has received no communication, written or oral, from the SEC or the Principal Market regarding the suspension or delisting of the Common Stock from the Principal Market. The Company and each of its Subsidiaries possess all certificates, authorizations and permits issued by the appropriate regulatory authorities necessary to conduct their respective businesses, except where the failure to possess such certificates, authorizations or permits would not have, individually or in the aggregate, a Material Adverse Effect, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit. There is no agreement, commitment, judgment, injunction, order or decree binding upon the Company or any of its Subsidiaries or to which the Company or any of its Subsidiaries is a party which has or would reasonably be expected to have the effect of prohibiting or materially impairing any business practice of the Company or any of its Subsidiaries, any acquisition of property by the Company or any of its Subsidiaries or the conduct of business by the Company or any of its Subsidiaries as currently conducted other than such effects, individually or in the aggregate, which have not had and would not reasonably be expected to have a Material Adverse Effect on the Company or any of its Subsidiaries.

(o) Foreign Corrupt Practices. Neither the Company, the Company's subsidiary or any director, officer, agent, employee, nor any other person acting for or on behalf of the foregoing (individually and collectively, a "Company Affiliate") have violated the U.S. Foreign Corrupt Practices Act (the "FCPA") or any other applicable anti-bribery or anti-corruption laws, nor has any Company Affiliate offered, paid, promised to pay, or authorized the payment of any money, or offered, given, promised to give, or authorized the giving of anything of value, to any officer, employee or any other person acting in an official capacity for any Governmental Entity to any political party or official thereof or to any candidate for political office (individually and collectively, a "Government Official") or to any person under circumstances where such Company Affiliate knew or was aware of a high probability that all or a portion of such money or thing of value would be offered, given or promised, directly or indirectly, to any Government Official, for the purpose of:

(i) (A) influencing any act or decision of such Government Official in his/her official capacity, (B) inducing such Government Official to do or omit to do any act in violation of his/her lawful duty, (C) securing any improper advantage, or (D) inducing such Government Official to influence or affect any act or decision of any Governmental Entity, or

(ii) assisting the Company or its Subsidiaries in obtaining or retaining business for or with, or directing business to, the Company or its Subsidiaries.

(p) Sarbanes-Oxley Act. The Company and each Subsidiary is in compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002, as amended, and any and all applicable rules and regulations promulgated by the SEC thereunder.

(q) Transactions With Affiliates. Except as disclosed in the SEC Documents or for which no disclosure is required in the SEC Documents, no current or former employee, partner, director, officer or stockholder (direct or indirect) of the Company or its Subsidiaries, or any associate, or, to the knowledge of the Company, any affiliate of any thereof, or any relative with a relationship no more remote than first cousin of any of the foregoing, is presently, or has ever been, (i) a party to any transaction with the Company or its Subsidiaries (including any contract, agreement or other arrangement providing for the furnishing of services by, or rental of real or personal property from, or otherwise requiring payments to, any such director, officer or stockholder or such associate or affiliate or relative Subsidiaries (other than for ordinary course services as employees, officers or directors of the Company or any of its Subsidiaries)) or (ii) the direct or indirect owner of an interest in any corporation, firm, association or business organization which is a competitor, supplier or customer of the Company or its Subsidiaries (except for a passive investment (direct or indirect) in less than 5% of the common equity of a company whose securities are traded on or quoted through an Eligible Market (as defined in the Certificate of Designations)), nor does any such Person receive income from any source other than the Company or its Subsidiaries which relates to the business of the Company or its Subsidiaries or should properly accrue to the Company or its Subsidiaries. No employee, officer, stockholder or director of the Company or any of its Subsidiaries or member of his or her immediate family is indebted to the Company or its Subsidiaries, as the case may be, nor is the Company or any of its Subsidiaries indebted (or committed to make loans or extend or guarantee credit) to any of them, other than (i) for payment of salary for services rendered, (ii) reimbursement for reasonable expenses incurred on behalf of the Company, and (iii) for other standard employee benefits made generally available to all employees or executives (including stock option agreements outstanding under any stock option plan approved by the Board of Directors of the Company).

(r) Equity Capitalization. As of the date hereof, the authorized capital stock of the Company consists solely of (i) 16,666,666 shares of Common Stock, of which 2,307,632 shares of Common Stock are issued and outstanding and 6,850,161 shares are reserved for issuance pursuant to outstanding Convertible Securities (as defined below) (other than the Preferred Shares and the Warrants) and (ii) 50,000,000 shares of preferred stock, of which 78,910 are issued and outstanding. "Convertible Securities" means any capital stock or other security of the Company or any of its Subsidiaries that is at any time and under any circumstances directly or indirectly convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any capital stock or other security of the Company (including, without limitation, Common Stock) or any of its Subsidiaries. All of such outstanding shares are duly authorized and have been, or upon issuance will be, validly issued and are fully paid and non-assessable. Except as disclosed in the SEC Documents, (i) none of the Company's or any Subsidiary's capital stock is subject to preemptive rights or any other similar rights or any liens or

encumbrances suffered or permitted by the Company or any Subsidiary; (ii) there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any capital stock of the Company or any of its Subsidiaries, or contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional capital stock of the Company or any of its Subsidiaries or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any capital stock of the Company or any of its Subsidiaries; (iii) there are no outstanding debt securities, notes, credit agreements, credit facilities or other agreements, documents or instruments evidencing Indebtedness of the Company or any of its Subsidiaries or by which the Company or any of its Subsidiaries is or may become bound; (iv) there are no financing statements securing obligations in any amounts filed in connection with the Company or any of its Subsidiaries; (v) there are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of their securities under the 1933 Act (except pursuant to the Registration Rights Agreement); (vi) there are no outstanding securities or instruments of the Company or any of its Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to redeem a security of the Company or any of its Subsidiaries; (vii) there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities; (viii) neither the Company nor any Subsidiary has any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement; and (ix) neither the Company nor any of its Subsidiaries have any liabilities or obligations required to be disclosed in the SEC Documents which are not so disclosed in the SEC Documents, other than those incurred in the ordinary course of the Company's or its Subsidiaries' respective businesses and which, individually or in the aggregate, do not or could not have a Material Adverse Effect. The Company has furnished to the Buyers true, correct and complete copies of the Certificate of Incorporation, the Bylaws, and the terms of all Convertible Securities convertible into, or exercisable or exchangeable for, shares of Common Stock and the material rights of the holders thereof in respect thereto.

(s) Indebtedness and Other Contracts. Neither the Company nor any of its Subsidiaries, (i) has any outstanding debt securities, notes, credit agreements, credit facilities or other agreements, documents or instruments evidencing Indebtedness of the Company or any of its Subsidiaries or by which the Company or any of its Subsidiaries is or may become bound, (ii) is a party to any contract, agreement or instrument, the violation of which, or default under which, by the other party(ies) to such contract, agreement or instrument could reasonably be expected to result in a Material Adverse Effect, (iii) has any financing statements securing obligations in any amounts filed in connection with the Company or any of its Subsidiaries; (iv) is in violation of any term of, or in default under, any contract, agreement or instrument relating to any Indebtedness, except where such violations and defaults would not result, individually or in the aggregate, in a Material Adverse Effect, or (v) is a party to any contract, agreement or instrument relating to any Indebtedness, the performance of which, in the judgment of the Company's officers, has or is expected to have a Material Adverse Effect. For purposes of this Agreement: (x) "Indebtedness" of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services (including, without limitation, "finance leases" in accordance with GAAP) (other than trade payables entered into in the ordinary course of business consistent with past practice), (C) all reimbursement or payment obligations, currently due and payable, with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with GAAP, consistently applied for the periods covered thereby, is classified as a finance lease, (G) all indebtedness referred to in clauses (A) through (F) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (H) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (G) above; and (y) "Contingent Obligation" means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any Indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

(t) Litigation. There is no material action, suit, arbitration, proceeding, inquiry or investigation before or by the Principal Market, any court, public board, other Governmental Entity, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its Subsidiaries, the Common Stock or any of the Company's or its Subsidiaries' officers or directors, whether of a civil or criminal nature or otherwise, in their capacities as such, except as disclosed in the SEC Documents. To its knowledge, no director, officer or employee of the Company or any of its subsidiaries has willfully violated 18 U.S.C. §1519 or engaged in spoliation in reasonable anticipation of litigation. Without limitation of the foregoing, there has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the SEC involving the Company, any of its Subsidiaries or any current or former director or officer of the Company or any of its Subsidiaries relating to the Company. Neither the Company nor any of its Subsidiaries is subject to any order, writ, judgment, injunction, decree, determination or award of any Governmental Entity.

(u) 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 been refused any insurance coverage sought or applied for, and neither the Company nor any such Subsidiary has any reason to believe that it will be unable 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.

(v) Employee Matters: Benefit Plans

- (i) The Company and its Subsidiaries have complied in all material respects with all applicable laws relating to wages, hours, equal opportunity, collective bargaining, workers' compensation insurance and the payment of social security and other taxes. The Company is not aware that any officer, key employee or group of employees intends to terminate his, her or their employment with the Company or its Subsidiaries, as the case may be, nor does the Company have a present intention, or know of a present intention of its Subsidiaries, to terminate the employment of any officer or key employee. There are no pending or, to the knowledge of the Company, threatened employment discrimination charges or complaints against or involving the Company or its Subsidiaries before any federal, state, or local board, department, commission or agency, or unfair labor practice charges or complaints, disputes or grievances affecting the Company or its Subsidiaries.
- (ii) No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company's or its Subsidiaries' employees is a member of a union that relates to such employee's relationship with the Company or such Subsidiary, and neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that their relationships with their employees are good.
- (iii) The Company and its Subsidiaries are in compliance in all material respects with the applicable provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). No benefit plan of the Company or any Subsidiary (a) is subject to the provisions of Section 412 of the Code or Part 3 of Subtitle B of Title I of ERISA, (b) is subject to Title IV of ERISA, (c) is a "multiemployer plan" (within the meaning of Section 3(37) of ERISA). Since inception, neither the Company, its Subsidiaries, nor any business or entity treated as a single employer with the Company or its Subsidiaries for purposes of Title IV of ERISA contributed to or was obliged to contribute to a pension plan that was at any time subject to Title IV of ERISA.

(w) Assets; Title. The Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and the Subsidiaries are in material compliance.

(x) Intellectual Property. The Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights necessary or required for use in connection with their respective businesses as described in the SEC Reports and which the failure to so have could have a Material Adverse Effect (collectively, the “Intellectual Property Rights”). None of, and neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of, the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years from the date of this Agreement. Neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Intellectual Property Rights violate or infringe upon the rights of any Person, except as could not have or reasonably be expected to not have a Material Adverse Effect. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(y) Environmental Laws. The Company and its Subsidiaries (A) are in compliance with any and all Environmental Laws (as defined below), (B) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (C) are in compliance with all terms and conditions of any such permit, license or approval where, in each of the foregoing clauses (A), (B) and (C), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect. 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.

(z) Subsidiary Rights. The Company or one of its Subsidiaries has the unrestricted right to vote, and (subject to limitations imposed by applicable law) to receive dividends and distributions on, all capital securities of its Subsidiaries as owned by the Company or such Subsidiary.

(aa) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and its Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) 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 and (iii) has set aside on its books provision reasonably adequate for the payment of all material 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 or of any Subsidiary know of no basis for any such claim.

(bb) Internal Accounting and Disclosure Controls. Other than as disclosed in the SEC Reports, the Company and each of its Subsidiaries maintains internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the 1934 Act) that is effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including 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 GAAP and to maintain asset and liability accountability, (iii) access to assets or incurrence of liabilities is permitted only in accordance with management’s general or specific authorization and (iv) the recorded accountability for assets and liabilities is compared with the existing assets and liabilities at reasonable intervals and appropriate action is taken with respect to any difference. Other than as disclosed in the SEC Reports, the Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the 1934 Act) that are effective in ensuring that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the SEC, including, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is accumulated and communicated to the Company’s management, including its principal executive officer or officers and its principal financial officer or officers, as appropriate, to allow timely decisions regarding required disclosure. Since January 1, 2021, other than as disclosed in the SEC Reports, neither the Company nor any of its Subsidiaries has received any notice or correspondence from any accountant, Governmental Entity or other Person relating to any material weakness or significant deficiency in any part of the internal controls over financial reporting of the Company or any of its Subsidiaries.

(cc) 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.

(dd) Investment Company Status. The Company is not, and upon consummation of the sale of the Securities will not be, an “investment company,” an affiliate of an “investment company,” a company controlled by an “investment company” or an “affiliated person” of, or “promoter” or “principal underwriter” for, an “investment company” as such terms are defined in the Investment Company Act of 1940, as amended.

(ee) Acknowledgement Regarding Buyers’ Trading Activity. It is understood and acknowledged by the Company that (i) following the public disclosure of the transactions contemplated by the Transaction Documents, in accordance with the terms thereof, none of the Buyers have been asked by the Company or any of its Subsidiaries to agree, nor has any Buyer agreed with the Company or any of its Subsidiaries, to desist from effecting any transactions in or with respect to (including, without limitation, purchasing or selling, long and/or short) any securities of the Company, or “derivative” securities based on securities issued by the Company or to hold any of the Securities for any specified term; (ii) any Buyer, and counterparties in “derivative” transactions to which any such Buyer is a party, directly or indirectly, presently may have a “short” position in the Common Stock which was established prior to such Buyer’s knowledge of the transactions contemplated by the Transaction Documents; (iii) each Buyer shall not be deemed to have any affiliation with or control over any arm’s length counterparty in any “derivative” transaction; and (iv) each Buyer may rely on the Company’s obligation to timely deliver shares of Common Stock upon conversion, exercise or exchange, as applicable, of the Securities as and when required pursuant to the Transaction Documents for purposes of effecting trading in the Common Stock of the Company. The Company further understands and acknowledges that following the public disclosure of the transactions contemplated by the Transaction Documents pursuant to the 8-K Filing (as defined below) one or more Buyers may engage in hedging and/or trading activities (including, without limitation, the location and/or reservation of borrowable shares of Common Stock) at various times during the period that the Securities are outstanding, including, without limitation, during the periods that the value and/or number of the Warrant Shares or Conversion Shares, as applicable, deliverable with respect to the Securities are being determined and such hedging and/or trading activities (including, without limitation, the location and/or reservation of borrowable shares of Common Stock), if any, can reduce the value of the existing stockholders’ equity interest in the Company both at and after the time the hedging and/or trading activities are being conducted. The Company acknowledges that such aforementioned hedging and/or trading activities do not constitute a breach of this Agreement, the Certificate of Designations, the Warrants or any other Transaction Document or any of the documents executed in connection herewith or therewith.

(ff) Manipulation of Price. Neither the Company nor any of its Subsidiaries has, and, to the knowledge of the Company, no Person acting on their behalf has, directly or indirectly, (i) taken any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company or any of its Subsidiaries 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 (other than the Placement Agents), (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company or any of its Subsidiaries or (iv) paid or agreed to pay any Person for research services with respect to any securities of the Company or any of its Subsidiaries.

(gg) U.S. Real Property Holding Corporation. Neither the Company nor any of its Subsidiaries is, or has ever been a U.S. real property holding corporation within the meaning of Section 897 of the Code, and the Company and each Subsidiary shall so certify upon any Buyer's request.

(hh) Registration Rights. Aside from rights pursuant to the Registration Rights Agreement, no Person has any right to cause the Company or any Subsidiary to effect the registration under the 1933 Act of any securities of the Company or any Subsidiary. The Company is eligible to register the Registrable Securities (as defined in the Registration Rights Agreement) for resale by the Buyers using Form S-3 promulgated under the 1933 Act.

(ii) Transfer Taxes. On the Closing Date, all stock transfer or other taxes (other than income or similar taxes) which are required to be paid in connection with the issuance, sale and transfer of the Securities to be sold to each Buyer hereunder will be, or will have been, fully paid or provided for by the Company, and all laws imposing such taxes will be or will have been complied with.

(jj) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries is subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). Neither the Company nor any of its Subsidiaries or affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(kk) Shell Company Status. The Company is not, and has never been, an issuer identified in, or subject to, Rule 144(i).

(ll) Illegal or Unauthorized Payments: Political Contributions. Neither the Company nor any of its Subsidiaries nor, to the best of the Company's knowledge (after reasonable inquiry of its officers and directors), any of the officers, directors, employees, agents or other representatives of the Company or any of its Subsidiaries or any other business entity or enterprise with which the Company or any Subsidiary is or has been affiliated or associated, has, directly or indirectly, made or authorized any payment, contribution or gift of money, property, or services, whether or not in contravention of applicable law, (i) as a kickback or bribe to any Person or (ii) to any political organization, or the holder of or any aspirant to any elective or appointive public office except for personal political contributions not involving the direct or indirect use of funds of the Company or any of its Subsidiaries.

(mm) Money Laundering. The Company and its Subsidiaries are in compliance with, and have not previously violated, the USA Patriot Act of 2001 and all other applicable U.S. and non-U.S. anti-money laundering laws and regulations, including, without limitation, the laws, regulations and Executive Orders and sanctions programs administered by the U.S. Office of Foreign Assets Control, including, but not limited, to (i) Executive Order 13224 of September 23, 2001 entitled, "Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten to Commit, or Support Terrorism" (66 Fed. Reg. 49079 (2001)) and (ii) any regulations contained in 31 CFR, Subtitle B, Chapter V.

(nn) Stock Option Plans. Each stock option granted by the Company was granted (i) in accordance with the terms of the applicable stock option plan of the Company and (ii) with an exercise price at least equal to the fair market value of the shares of Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company's stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no policy or practice of the Company to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(oo) No Disagreements with Accountants and Lawyers. There are no material disagreements of any kind presently existing, or reasonably anticipated by the Company to arise, between the Company and the accountants and lawyers formerly or presently employed by the Company and the Company is current with respect to any fees owed to its accountants and lawyers which could affect the Company's ability to perform any of its obligations under any of the Transaction Documents. In addition, on or prior to the date hereof, the Company had discussions with its accountants about its financial statements previously filed with the SEC. Based on those discussions, the Company has no reason to believe that it will need to restate any such financial statements or any part thereof.

(pp) No Disqualification Events. With respect to Securities to be offered and sold hereunder in reliance on Rule 506(b) under the 1933 Act ("Regulation D Securities"), none of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering contemplated hereby, any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the 1933 Act) connected with the Company in any capacity at the time of sale (each, an "Issuer Covered Person" and, together, "Issuer Covered Persons") is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the 1933 Act (a "Disqualification Event"), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event. The Company has complied, to the extent applicable, with its disclosure obligations under Rule 506(e), and has furnished to the Buyers a copy of any disclosures provided thereunder.

(qq) Other Covered Persons. The Company is not aware of any Person that has been or will be paid (directly or indirectly) remuneration for solicitation of Buyers or potential purchasers in connection with the sale of any Regulation D Securities.

(rr) No Additional Agreements. The Company does not have any agreement or understanding with any Buyer with respect to the transactions contemplated by the Transaction Documents other than as specified in the Transaction Documents.

(ss) Public Utility Holding Act. None of the Company nor any of its Subsidiaries is a "holding company," or an "affiliate" of a "holding company," as such terms are defined in the Public Utility Holding Act of 2005.

(tt) Federal Power Act. None of the Company nor any of its Subsidiaries is subject to regulation as a "public utility" under the Federal Power Act, as amended.

(uu) Cybersecurity. The Company and its Subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "IT Systems") are adequate for, and operate and perform in all material respects as required in connection with the operation of the

business of the Company and its subsidiaries as currently conducted, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants that would reasonably be expected to have a Material Adverse Effect on the Company's business. The Company and its Subsidiaries have implemented and maintained commercially reasonable physical, technical and administrative controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data, including "Personal Data," used in connection with their businesses. "Personal Data" means (i) a natural person's name, street address, telephone number, email address, photograph, social security number or tax identification number, driver's license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as "personally identifying information" under the Federal Trade Commission Act, as amended; (iii) "personal data" as defined by the European Union General Data Protection Regulation ("GDPR") (EU 2016/679); (iv) any information which would qualify as "protected health information" under the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act (collectively, "HIPAA"); and (v) any other piece of information that allows the identification of such natural person, or his or her family, or permits the collection or analysis of any data related to an identified person's health or sexual orientation. Since January 1, 2021, there have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person or such, nor any incidents under internal review or investigations relating to the same except in each case, where such would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The Company and its Subsidiaries are presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Personal Data and to the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification except in each case, where such would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

(vv) Compliance with Data Privacy Laws. The Company and its Subsidiaries are in compliance with all applicable state and federal data privacy and security laws and regulations, including without limitation HIPAA, and the Company and its Subsidiaries have taken commercially reasonable actions to prepare to comply with, and since May 25, 2018, have been and currently are in compliance with, the GDPR (EU 2016/679) (collectively, the "Privacy Laws") except in each case, where such would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. To ensure compliance with the Privacy Laws, the Company and its Subsidiaries have in place, comply with, and take appropriate steps reasonably designed to ensure compliance in all material respects with their policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling, and analysis of Personal Data (the "Policies"). The Company and its Subsidiaries have made all disclosures to users or customers required by applicable laws and regulatory rules or requirements, and none of such disclosures made or contained in any Policy have, to the knowledge of the Company, been inaccurate or in violation of any applicable laws and regulatory rules or requirements in any material respect. The Company further certifies that neither it nor any Subsidiary: (i) has received notice of any actual or potential liability under or relating to, or actual or potential violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation, or other corrective action pursuant to any Privacy Law; or (iii) is a party to any order, decree, or agreement that imposes any obligation or liability under any Privacy Law.

(ww) Disclosure. The Company confirms that neither it nor any other Person acting on its behalf has provided any of the Buyers or their agents or counsel with any information that constitutes or could reasonably be expected to constitute material, non-public information concerning the Company or any of its Subsidiaries, other than the existence of the transactions contemplated by this Agreement and the other Transaction Documents. The Company understands and confirms that each of the Buyers will rely on the foregoing representations in effecting transactions in securities of the Company. All disclosure provided to the Buyers regarding the Company and its Subsidiaries, their businesses and the transactions contemplated hereby, including the schedules to this Agreement, furnished by or on behalf of the Company or any of its Subsidiaries is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. Each press release issued by the Company or any of its Subsidiaries during the twelve (12) months preceding the date of this Agreement did not at the time of release contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading. Other than with respect to the transactions contemplated by this Agreement and the other Transaction Documents, no event or circumstance has occurred or information exists with respect to the Company or any of its Subsidiaries or its or their business, properties, liabilities, prospects, operations (including results thereof) or conditions (financial or otherwise), which, under applicable law, rule or regulation, requires public disclosure at or before the date hereof or announcement by the Company but which has not been so publicly disclosed. The Company acknowledges and agrees that no Buyer makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 2.

4. Covenants.

(a) Best Efforts. Each Buyer shall use its best efforts to timely satisfy each of the covenants hereunder and conditions to be satisfied by it as provided in Section 6 of this Agreement. The Company shall use its best efforts to timely satisfy each of the covenants hereunder and conditions to be satisfied by it as provided in Section 7 of this Agreement.

(b) Reserved.

(c) Form D and Blue Sky. The Company shall 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 the Closing Date, take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for, or to, qualify the Securities for sale to the Buyers at the 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 the Buyers on or prior to the Closing Date. Without limiting any other obligation of the Company under this Agreement, the Company shall timely make all filings and reports relating to the offer and sale of the Securities required under all applicable securities laws (including, without limitation, all applicable federal securities laws and all applicable "Blue Sky" laws), and the Company shall comply with all applicable federal, foreign, state and local laws, statutes, rules, regulations and the like relating to the offering and sale of the Securities to the Buyers.

(d) Reporting Status. From the date hereof until the date on which all of the Registrable Securities shall have been sold (the "Reporting Period"), the Company shall timely file all reports required to be filed with the SEC pursuant to the 1934 Act, and the Company shall not terminate its status as an issuer required to file reports under the 1934 Act even if the 1934 Act or the rules and regulations thereunder would no longer require or otherwise permit such termination.

(e) Use of Proceeds. The Company shall use the proceeds from the sale of the Securities for general corporate purposes, but not, directly or indirectly, for (i) the satisfaction of any indebtedness of the Company or any of its Subsidiaries outstanding on the date hereof, (ii) the redemption or repurchase of any securities of the Company or any of its Subsidiaries, or (iii) the settlement of any litigation outstanding on the date hereof.

(f) Financial Information. The Company agrees to send the following to each Buyer during the Reporting Period (i) unless the following are filed with the SEC through EDGAR and are available to the public through the EDGAR system, within one (1) Business Day after the filing thereof with the SEC, a copy of its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, any other interim reports or any consolidated balance sheets, income statements, stockholders' equity statements and/or cash flow statements for any period other than any annual report, any Current Reports on Form 8-K and any registration statements (other than on Form S-8) or amendments filed pursuant to the 1933 Act, (ii) unless the following are either filed with the SEC through EDGAR or are otherwise widely disseminated via a recognized news release service (such as PR Newswire), on the same day as the release thereof, email copies of all press releases issued by the Company or any of its Subsidiaries and (iii) unless the following are filed with the SEC through EDGAR, copies of any notices and other information made available or given to the stockholders of the Company, as applicable, generally, contemporaneously with the making available or giving thereof to the stockholders.

(g) Listing. The Company shall promptly secure the listing or designation for quotation (as the case may be) of all of the Conversion Shares and the Warrant Shares upon each national securities exchange and automated quotation system, if any, upon which the Common Stock is then listed or designated for quotation (as the case may be) (subject to official notice of issuance) and shall maintain such listing or designation for quotation (as the case may be) of all of the Conversion Shares and the Warrant Shares from time to time issuable under the terms of the Transaction Documents on such national securities exchange or automated quotation system. The Company shall maintain the Common Stock's listing or authorization for quotation (as the case may be) on the Principal Market, The New York Stock Exchange, the NYSE American, the Nasdaq Global Market or the Nasdaq Global Select Market (each, an "Eligible Market"). Neither the Company nor any of its Subsidiaries shall take any action which could be reasonably expected to result in the delisting or suspension of the Common Stock on the Principal Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 4(g).

(h) Fees. The Company shall reimburse the lead Buyer a non-accountable amount of \$50,000 for all costs and expenses incurred by it or its affiliates in connection with the structuring, documentation, negotiation and closing of the transactions contemplated by the Transaction Documents (including, without limitation, as applicable, all reasonable legal fees of outside counsel and disbursements of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. ("Buyer Counsel"), counsel to the lead Buyer, any other reasonable fees and expenses in connection with the structuring, documentation, negotiation and closing of the transactions contemplated by the Transaction Documents and due diligence and regulatory filings in connection therewith) and shall be withheld by the lead Buyer from its Purchase Price at the Closing. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, transfer agent fees, DTC (as defined below) fees or broker's commissions (other than for Persons engaged by any Buyer) relating to or arising out of the transactions contemplated hereby (including, without limitation, any fees or commissions payable to the Placement Agents). The Company shall pay, and the Company shall hold each Buyer harmless against, any liability, loss or expense (including, without limitation, reasonable attorneys' fees and out-of-pocket expenses) arising in connection with any claim relating to any such payment. Except as otherwise set forth in the Transaction Documents, each party to this Agreement shall bear its own expenses in connection with the sale of the Securities to the Buyers.

(i) Pledge of Securities. Notwithstanding anything to the contrary contained in this Agreement, the Company acknowledges and agrees that the Securities may be pledged by a Buyer in connection with a bona fide margin agreement or other loan or financing arrangement that is secured by the Securities. The pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Buyer effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document. The Company hereby agrees to execute and deliver such documentation as a pledgee of the Securities may reasonably request in connection with a pledge of the Securities to such pledgee by a Buyer.

(j) Disclosure of Transactions and Other Material Information.

(i) Disclosure of Transaction. The Company shall no later than 9:30 a.m., New York time, on the Business Day following the date of this Agreement, file a Current Report on Form 8-K describing all the material terms of the transactions contemplated by the Transaction Documents in the form required by the 1934 Act and attaching all the material Transaction Documents (including, without limitation, this Agreement (and all schedules to this Agreement, to the extent material), the form of Certificate of Designations, the form of Registration Rights Agreement and the form of the Warrant) (including the attachments thereto, the "8-K Filing"). From and after the filing of the 8-K Filing, the Company shall have disclosed all material, non-public information (if any) provided to any of the Buyers by the Company or any of its Subsidiaries or any of their respective officers, directors, employees or agents in connection with the transactions contemplated by the Transaction Documents. In addition, effective upon the filing of the 8-K Filing, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and any of the Buyers or any of their affiliates, on the other hand, shall terminate.

(ii) Limitations on Disclosure. The Company shall not, and the Company shall cause each of its Subsidiaries and each of its and their respective officers, directors, employees and agents not to, provide any Buyer with any material, non-public information regarding the Company or any of its Subsidiaries from and after the date hereof without the express prior written consent of such Buyer (which may be granted or withheld in such Buyer's sole discretion). In the event of a breach of any of the foregoing covenants, including, without limitation, Section 4(o) of this Agreement, or any of the covenants or agreements contained in any other Transaction Document, by the Company, any of its Subsidiaries, or any of its or their respective officers, directors, employees and agents (as determined in the reasonable good faith judgment of such Buyer), in addition to any other remedy provided herein or in the Transaction Documents, such Buyer shall have the right to make a public disclosure, in the form of a press release, public advertisement or otherwise, of such breach or such material, non-public information, as applicable, without the prior approval by the Company, any of its Subsidiaries, or any of its or their respective officers, directors, employees or agents. No Buyer shall have any liability to the Company, any of its Subsidiaries, or any of its or their respective officers, directors, employees, affiliates, stockholders or agents, for any such disclosure. To the extent that the Company, directly or indirectly, delivers any material, non-public information to a Buyer without such Buyer's consent, the Company hereby covenants and agrees that such Buyer shall not have any duty of confidentiality with respect to, or a duty not to trade on the basis of, such material, non-public information. Subject to the foregoing, neither the Company, its Subsidiaries nor any Buyer shall issue any press releases or any other public statements with respect to the transactions contemplated hereby; provided, however, the Company shall be entitled, without the prior approval of any Buyer, to make any press release or other public disclosure with respect to such transactions (i) in substantial conformity with the 8-K Filing and contemporaneously therewith and (ii) as is required by applicable law and regulations (provided that in the case of clause (i) each Buyer shall be consulted by the Company in connection with any such press release or other public disclosure prior to its release). Without the prior written consent of the applicable Buyer (which may be granted or withheld in such Buyer's sole discretion), the Company shall not (and shall cause each of its Subsidiaries and affiliates to not) disclose the name of such Buyer in any filing, announcement, release or otherwise. Notwithstanding anything contained in this Agreement to the contrary and without implication that the contrary would otherwise be true, the Company expressly acknowledges and agrees that no Buyer shall have (unless expressly agreed to by a particular Buyer after the date hereof in a written definitive and binding agreement executed by the Company and such particular Buyer (it being understood and agreed that no Buyer may bind any other Buyer with respect thereto)), any duty of confidentiality with respect to, or a duty not to trade on the basis of, any material, non-public information regarding the Company and/or any of its Subsidiaries.

(k) Additional Registration Statements. From the date hereof until the date that is ninety (90) days following the Applicable Date (as defined below), and at any time thereafter while any Registration Statement is not effective or the prospectus contained therein is not available for use or any Current Public Information Failure (as defined in the Registration Rights Agreement) exists, the Company shall not file a registration statement or an offering statement under the 1933 Act relating to securities that are not the Registrable Securities (other than a registration statement on Form S-8 or such supplements or amendments to registration statements that are outstanding and have been declared effective by the SEC (solely to the extent necessary to keep such registration statements effective and available and not with respect to any Subsequent Placement)). "Applicable Date" means the earlier of (x) the first date on which the resale by the Buyers of all the Registrable Securities required to be filed on the initial Registration Statement (as defined in the Registration Rights Agreement) pursuant to the Registration Rights Agreement is declared effective by the SEC (and each prospectus contained therein is available for use on such date) or (y) the first date on which all of the Registrable Securities are eligible to be resold by the Buyers pursuant to Rule 144 (or, if a Current Public Information Failure has occurred and is continuing, such later date after which the Company has cured such Current Public Information Failure).

(l) Additional Issuance of Securities. So long as any Buyer beneficially owns any Preferred Shares or Warrants, the Company will not, without the prior written consent of the Required Holders, directly or indirectly, issue any other securities that would cause a breach or default under the Certificate of Designations or the Warrants. The Company agrees that for the period commencing on the date hereof and ending on the earlier of (1) the date immediately following the 180th day after the first Installment Date (as defined in the Certificate of Designations) and (2) the occurrence of a Segregated Cash Trigger (the "Restricted Period"), neither the Company nor any of its Subsidiaries shall directly or indirectly issue, offer, sell, grant any option or right to purchase, or otherwise dispose of (or announce any issuance, offer, sale, grant of any option or right to purchase or other disposition of) any equity security or any equity-linked or related security (including, without limitation, any "equity security" (as that term is defined under

Rule 405 promulgated under the 1933 Act), any Convertible Securities (as defined below), any preferred stock or any purchase rights) (any such issuance, offer, sale, grant, disposition or announcement (whether occurring during the Restricted Period or at any time thereafter), is referred to as a "Subsequent Placement"). Notwithstanding the foregoing, this Section 4(l) shall not apply in respect of the issuance of (i) shares of Common Stock or standard options to purchase Common Stock issued or issuable to directors, officers, employees or other service providers of the Company in their capacity as such pursuant to an Approved Stock Plan (as defined below), provided that (1) all such issuances (taking into account the shares of Common Stock issuable upon exercise of such awards) after the date hereof pursuant to this clause (i) do not, in the aggregate, exceed more than 10% of the shares of Common Stock issued and outstanding as of the date of such issuance and (2) the exercise price of any such options is not lowered and none of such options are amended to increase the number of shares issuable thereunder; (ii) shares of Common Stock issued or issuable upon the conversion or exercise of Convertible Securities (other than shares of Common Stock issued or issuable pursuant to an Approved Stock Plan that are covered by clause (i) above) issued prior to the date hereof, provided that the conversion, exercise or other method of issuance (as the case may be) of any such Convertible Security is made solely pursuant to the conversion, exercise or other method of issuance (as the case may be) provisions of such Convertible Security that were in effect on the date immediately prior to the date hereof, the conversion, exercise or issuance price of any such Convertible Securities (other than standard options to purchase shares of Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (i) above) is not lowered, none of such Convertible Securities are amended to increase the number of shares issuable thereunder and none of the terms or conditions of any such Convertible Securities (other than those issued pursuant to an Approved Stock Plan that are covered by clause (i) above) are otherwise materially changed in any manner that adversely affects any of the Buyers, (iii) the Preferred Shares, (iv) the Conversion Shares, (v) the Warrant Shares and any other securities issued or issuable pursuant to this Agreement or any of the Transaction Documents, (vi) securities issued as consideration for the acquisition of another entity by the Company by merger, purchase of substantially all of the assets or other reorganization or bona fide joint venture agreement, provided that such issuance is approved by the majority of the disinterested directors of the Company and provided that such securities are issued as "restricted securities" (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the Restricted Period and such issuance does not, in the aggregate, exceed more than 5% of the shares of Common Stock issued and outstanding immediately prior to the date hereof (each of the foregoing in clauses (i) through (vi), collectively the "Excluded Securities") and (vii) provided that the Equity Conditions (as defined in the Certificate of Designations) are then satisfied and that the closing price of the Common Stock on the Trading Market equals or exceeds 200% of the initial Conversion Price (as defined in the Certificate of Designations) for three consecutive Trading Days, sales of shares of Common Stock or Convertible Securities at a per share purchase price in excess of 160% of the initial Conversion Price (as defined in the Certificate of Designations) (as adjusted for stock splits, stock dividends, stock combinations, recapitalizations and similar events; provided that if 90% of the aggregate Stated Value (as defined in the Certificate of Designations) of the Preferred Shares has been paid in full to the Buyers or otherwise converted to Common Stock, then the Company may sell shares of Common Stock at a per share purchase price in excess of 130% of the exercise price of the Warrants). "Approved Stock Plan" means any employee benefit plan which has been approved by the board of directors of the Company prior to or subsequent to the date hereof pursuant to which shares of Common Stock or other awards convertible, exercisable for or exchangeable for shares of Common Stock may be issued to any employee, officer, director or other service provider for services provided to the Company and/or a Subsidiary in their capacity as such.

(m) Reservation of Shares. So long as any of the Preferred Shares or Warrants remain outstanding, following the Stockholder Approval Date (as defined below), the Company shall take all action necessary to at all times have authorized, and reserved for the purpose of issuance, no less than the sum of (i) 200% of the maximum number of shares of Common Stock issuable upon conversion of all the Preferred Shares then outstanding (assuming for purposes hereof that (x) the Preferred Shares are convertible at the Floor Price (as defined in the Certificate of Designations) and (y) any such conversion shall not take into account any limitations on the conversion of the Preferred Shares set forth in the Certificate of Designations), and (ii) the maximum number of Warrant Shares issuable upon exercise of all the Warrants then outstanding (without regard to any limitations on the exercise of the Warrants set forth therein) (collectively, the "Required Reserve Amount"); provided that at no time shall the number of shares of Common Stock reserved pursuant to this Section 4(m) be reduced other than proportionally in connection with any conversion, exercise and/or redemption, as applicable of Preferred Shares and Warrants. If at any time following the Stockholder Approval Date, the number of shares of Common Stock authorized and reserved for issuance is not sufficient to meet the Required Reserve Amount, the Company will promptly take all corporate action necessary to authorize and reserve a sufficient number of shares, including, without limitation, calling a special meeting of stockholders to authorize additional shares to meet the Company's obligations pursuant to the Transaction Documents, in the case of an insufficient number of authorized shares, obtain stockholder approval of an increase in such authorized number of shares, and voting the management shares of the Company in favor of an increase in the authorized shares of the Company to ensure that the number of authorized shares is sufficient to meet the Required Reserve Amount.

(n) Conduct of Business. The business of the Company and its Subsidiaries shall not be conducted in violation of any law, ordinance or regulation of any Governmental Entity, except where such violations would not reasonably be expected to result, either individually or in the aggregate, in a Material Adverse Effect.

(o) Restriction on Variable Securities. Commencing on the date hereof until no Warrants remain outstanding, the Company and each Subsidiary shall be prohibited from effecting or entering into an agreement to effect any Subsequent Placement involving a Variable Rate Transaction. "Variable Rate Transaction" means a transaction in which the Company or any Subsidiary (i) issues or sells any Convertible Securities either (A) at a conversion, exercise or exchange rate or other price that is based upon and/or varies with the trading prices or quotations for the shares of Common Stock at any time after the initial issuance of such Convertible Securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such Convertible Securities or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock, other than pursuant to a customary "weighted average" anti-dilution provision or (ii) enters into any agreement (including, without limitation, an equity line of credit or an "at-the-market" offering) whereby the Company or any Subsidiary may sell securities at a future determined price (other than standard and customary "preemptive" or "participation" rights). Each Buyer shall be entitled to obtain injunctive relief against the Company and its Subsidiaries to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

(p) Participation Right. At any time after the Closing Date and until the later of (x) Preferred Shares are no longer outstanding and (y) the Maturity Date (as defined in the Certificate of Designations), neither the Company nor any of its Subsidiaries shall, directly or indirectly, effect any Subsequent Placement unless the Company shall have first complied with this Section 4(o). The Company acknowledges and agrees that the right set forth in this Section 4(o) is a right granted by the Company, separately, to each Buyer.

- (i) At least two (2) Trading Days prior to any proposed or intended Subsequent Placement, the Company shall deliver to each Buyer a written notice (each such notice, a "Pre-Notice"), which Pre-Notice shall not contain any information (including, without limitation, material, non-public information) other than: (A) if the proposed Offer Notice (as defined below) constitutes or contains material, non-public information, a statement asking whether the Buyer is willing to accept material non-public information or (B) if the proposed Offer Notice does not constitute or contain material, non-public information, (x) a statement that the Company proposes or intends to effect a Subsequent Placement, (y) a statement that the statement in clause (x) above does not constitute material, non-public information and (z) a statement informing such Buyer that it is entitled to receive an Offer Notice (as defined below) with respect to such Subsequent Placement upon its written request. Upon the written request of a Buyer within three (3) Trading Days after the Company's delivery to such Buyer of such Pre-Notice, and only upon a written request by such Buyer, the Company shall promptly, but no later than one (1) Trading Day after such request, deliver to such Buyer an irrevocable written notice (the "Offer Notice") of any proposed or intended issuance or sale or exchange (the "Offer") of the securities being offered (the "Offered Securities") in a Subsequent Placement, which Offer Notice shall (A) identify and describe the Offered Securities, (B) describe the price and other terms upon which they are to be issued, sold or exchanged, and the number or amount of the Offered Securities to be issued, sold or exchanged, (C) identify the Persons (if known) to which or with which the Offered Securities are to be offered, issued, sold or exchanged and (D) offer to issue and sell to or exchange with such Buyer in accordance with the terms of the Offer such Buyer's pro rata portion of 33 1/3% of the Offered Securities, provided that the number of Offered Securities which such Buyer shall have the right to subscribe for under this Section 4(p) shall be (x) based on such Buyer's pro rata portion of the aggregate stated value of the Preferred Shares purchased hereunder by all Buyers (the "Basic Amount"), and (y) with respect to each Buyer that elects to purchase its Basic Amount, any additional portion of the Offered Securities attributable to the Basic Amounts of other Buyers as such Buyer shall indicate it will purchase or acquire should the other Buyers subscribe for less than their Basic Amounts (the "Undersubscription Amount"), which process shall be repeated until each Buyer shall have an opportunity to subscribe for any remaining Undersubscription Amount.

- (ii) To accept an Offer, in whole or in part, such Buyer must deliver a written notice to the Company prior to the end of the third (3rd) Business Day after such Buyer's receipt of the Offer Notice (the "Offer Period"), setting forth the portion of such Buyer's Basic Amount that such Buyer elects to purchase and, if such Buyer shall elect to purchase all of its Basic Amount, the Undersubscription Amount, if any, that such Buyer elects to purchase (in either case, the "Notice of Acceptance"). If the Basic Amounts subscribed for by all Buyers are less than the total of all of the Basic Amounts, then each Buyer who has set forth an Undersubscription Amount in its Notice of Acceptance shall be entitled to purchase, in addition to the Basic Amounts subscribed for, the Undersubscription Amount it has subscribed for; provided, however, if the Undersubscription Amounts subscribed for exceed the difference between the total of all the Basic Amounts and the Basic Amounts subscribed for (the "Available Undersubscription Amount"), each Buyer who has subscribed for any Undersubscription Amount shall be entitled to purchase only that portion of the Available Undersubscription Amount as the Basic Amount of such Buyer bears to the total Basic Amounts of all Buyers that have subscribed for Undersubscription Amounts, subject to rounding by the Company to the extent it deems reasonably necessary. Notwithstanding the foregoing, if the Company desires to modify or amend the terms and conditions of the Offer prior to the expiration of the Offer Period, the Company may deliver to each Buyer a new Offer Notice and the Offer Period shall expire on the third (3rd) Business Day after such Buyer's receipt of such new Offer Notice.
- (iii) The Company shall have five (5) Business Days from the expiration of the Offer Period above (A) to offer, issue, sell or exchange all or any part of such Offered Securities as to which a Notice of Acceptance has not been given by a Buyer (the "Refused Securities") pursuant to a definitive agreement(s) (the "Subsequent Placement Agreement"), but only to the offerees described in the Offer Notice (if so described therein) and only upon terms and conditions (including, without limitation, unit prices and interest rates) that are not more favorable to the acquiring Person or Persons or less favorable to the Company than those set forth in the Offer Notice and (B) to publicly announce (x) the execution of such Subsequent Placement Agreement, and (y) either (I) the consummation of the transactions contemplated by such Subsequent Placement Agreement or (II) the termination of such Subsequent Placement Agreement, which shall be filed with the SEC on a Current Report on Form 8-K with such Subsequent Placement Agreement and any documents contemplated therein filed as exhibits thereto.
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- (iv) In the event the Company shall propose to sell less than all the Refused Securities (any such sale to be in the manner and on the terms specified in Section 4(p)(iii) above), then each Buyer may, at its sole option and in its sole discretion, withdraw its Notice of Acceptance or reduce the number or amount of the Offered Securities specified in its Notice of Acceptance to an amount that shall be not less than the number or amount of the Offered Securities that such Buyer elected to purchase pursuant to Section 4(p)(ii) above multiplied by a fraction, (i) the numerator of which shall be the number or amount of Offered Securities the Company actually proposes to issue, sell or exchange (including Offered Securities to be issued or sold to Buyers pursuant to this Section 4(p) prior to such reduction) and (ii) the denominator of which shall be the original amount of the Offered Securities. In the event that any Buyer so elects to reduce the number or amount of Offered Securities specified in its Notice of Acceptance, the Company may not issue, sell or exchange more than the reduced number or amount of the Offered Securities unless and until such securities have again been offered to the Buyers in accordance with Section 4(p)(i) above.
- (v) Upon the closing of the issuance, sale or exchange of all or less than all of the Refused Securities, such Buyer shall acquire from the Company, and the Company shall issue to such Buyer, the number or amount of Offered Securities specified in its Notice of Acceptance, as reduced pursuant to Section 4(p)(iv) above if such Buyer has so elected, upon the terms and conditions specified in the Offer. The purchase by such Buyer of any Offered Securities is subject in all cases to the preparation, execution and delivery by the Company and such Buyer of a separate purchase agreement relating to such Offered Securities reasonably satisfactory in form and substance to such Buyer and its counsel.
- (vi) Any Offered Securities not acquired by a Buyer or other Persons in accordance with this Section 4(p) may not be issued, sold or exchanged until they are again offered to such Buyer under the procedures specified in this Agreement.
- (vii) The Company and each Buyer agree that if any Buyer elects to participate in the Offer, (x) neither the Subsequent Placement Agreement with respect to such Offer nor any other transaction documents related thereto (collectively, the "Subsequent Placement Documents") shall include any term or provision whereby such Buyer shall be required to agree to any restrictions on trading as to any securities of the Company or be required to consent to any amendment to or termination of, or grant any waiver, release or the like under or in connection with, any agreement previously entered into with the Company or any instrument received from the Company, and (y) any registration rights set forth in such Subsequent Placement Documents shall be similar in all material respects to the registration rights contained in the Registration Rights Agreement.
- (viii) Notwithstanding anything to the contrary in this Section 4(p) and unless otherwise agreed to by such Buyer, the Company shall either confirm in writing to such Buyer that the transaction with respect to the Subsequent Placement has been abandoned or shall publicly disclose its intention to issue the Offered Securities, in either case, in such a manner such that such Buyer will not be in possession of any material, non-public information, by the fifth (5th) Business Day following delivery of the Offer Notice. If by such fifth (5th) Business Day, no public disclosure regarding a transaction with respect to the Offered Securities has been made, and no notice regarding the abandonment of such transaction has been received by such Buyer, such transaction shall be deemed to have been abandoned and such Buyer shall not be in possession of any material, non-public information with respect to the Company or any of its Subsidiaries. Should the Company decide to pursue such transaction with respect to the Offered Securities, the Company shall provide such Buyer with another Offer Notice and such Buyer will again have the right of participation set forth in this Section 4(p). The Company shall not be permitted to deliver more than one such Offer Notice to such Buyer in any sixty (60) day period, except as expressly contemplated by the last sentence of Section 4(p)(ii).

The restrictions contained in this Section 4(p) shall not apply in connection with the issuance of any Excluded Securities.

(q) **Dilutive Issuances.** For so long as any Preferred Shares or Warrants remain outstanding, the Company shall not, in any manner, enter into or affect any Dilutive Issuance (as defined in the Certificate of Designations) if the effect of such Dilutive Issuance is to cause the Company to be required to issue upon conversion of any Preferred Shares or exercise of any Warrant any shares of Common Stock in excess of that number of shares of Common Stock which the Company may issue upon conversion of the Preferred Shares and exercise of the Warrants without breaching the Company's obligations under the rules or regulations of the Principal Market. Notwithstanding the foregoing or anything else to the contrary contained herein, following the occurrence of a Segregated Cash Trigger (as defined in the Certificate of Designation) nothing in this Agreement shall prohibit the Company from effecting any Dilutive Issuance on such terms and at such prices as the Company may determine in its sole and absolute discretion and in compliance with the provisions of the Certificate of Designations, provided that any such Dilutive Issuance may not be a Variable Rate Transaction.

(r) **Restriction of Redemption and Cash Dividends.** So long as any Preferred Shares are outstanding, except as provided in the Certificate of Designations, the Company shall not, directly or indirectly, redeem, or declare or pay any cash dividend or distribution on, any securities of the Company without the prior express written consent of the Buyers.

(s) **Corporate Existence.** So long as any Buyer beneficially owns any Preferred Shares or Warrants, the Company shall not be party to any Fundamental Transaction (as defined in the Certificate of Designations) unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Certificate of Designations and the Warrants.

(t) Stock Splits. Until the Preferred Shares are no longer outstanding, the Company shall not effect any stock combination, reverse stock split or other similar transaction (or make any public announcement or disclosure with respect to any of the foregoing) without the prior written consent of the Required Holders (as defined below); provided, however, that the Company may effect a stock combination, reverse stock split or other similar transaction if necessary to comply with the requirements of the Principal Market without the prior written consent of the Required Holders.

(u) Conversion and Exercise Procedures. Each of the form of Exercise Notice (as defined in the Warrants) included in the Warrants and the form of Conversion Notice (as defined in the Certificate of Designations) included in the Certificate of Designations set forth the totality of the procedures required of the Buyers in order to exercise the Warrants or convert the Preferred Shares. No additional legal opinion, other information or instructions shall be required of the Buyers to exercise their Warrants or convert their Preferred Shares. The Company shall honor exercises of the Warrants and conversions of the Preferred Shares and shall deliver the Conversion Shares and Warrant Shares in accordance with the terms, conditions and time periods set forth in the Certificate of Designations and Warrants.

(v) Regulation M. The Company will not take any action prohibited by Regulation M under the 1934 Act, in connection with the distribution of the Securities contemplated hereby.

(w) General Solicitation. None of the Company, any of its affiliates (as defined in Rule 501(b) under the 1933 Act) or any person acting on behalf of the Company or such affiliate will solicit any offer to buy or offer or sell the Securities in this offering by means of any form of general solicitation or general advertising within the meaning of Regulation D, including: (i) any advertisement, article, notice or other communication published in any newspaper, magazine or similar medium or broadcast over television or radio; and (ii) any seminar or meeting whose attendees have been invited by any general solicitation or general advertising.

(x) Stockholder Approval. Within 45 days of Closing, the Company shall file with the SEC a proxy statement, in a form reasonably acceptable to the Buyers, soliciting the affirmative votes of each of its stockholders of record for approval of resolutions providing for (i) the issuance of the Securities, including, for the avoidance of doubt, the approval of a change of control of the Company, in compliance with the rules and regulations of the Principal Market and (ii) an increase in the authorized shares of the Company to ensure that the number of authorized shares is sufficient to meet the Required Reserve Amount (“Stockholder Approval” and the date on which such Stockholder Approval is obtained, the “Stockholder Approval Date”) and the Company shall use its reasonable best efforts to, at the expense of the Company, solicit its stockholders’ approval of such resolutions and to cause the Board of Directors of the Company to recommend to the stockholders that they approve such resolutions. The Company shall hold a special meeting of stockholders (the “Stockholder Meeting”) for purposes of Stockholder Approval no later than August 1, 2024 (the “Stockholder Meeting Deadline”), and the Company shall be obligated to seek to obtain the Stockholder Approval by the Stockholder Meeting Deadline. If, despite the Company’s reasonable best efforts the Stockholder Approval is not obtained on or prior to the Stockholder Meeting Deadline, the Company shall cause an additional Stockholder Meeting to be held within 90 days later. If, despite the Company’s reasonable best efforts the Stockholder Approval is not obtained after such subsequent stockholder meetings, the Company shall cause an additional Stockholder Meeting to be held semi-annually thereafter until such Stockholder Approval is obtained. Notwithstanding the above, the Company shall not be required to hold a Stockholder Meeting or seek Stockholder Approval any time following the time when the Preferred Shares are no longer outstanding if upon full exercise of the Warrants, the shares of Common Stock issued pursuant to the Preferred Shares and Warrants would not exceed the Exchange Cap (as defined in the Certificate of Designations). Each Buyer covenants to vote, and shall cause its affiliates to vote, all Preferred Shares owned by such Buyer or its affiliates, as applicable, in respect of any resolution presented to the stockholders of the Company for the purpose of obtaining the Stockholder Approval. For clarity, the Buyer’s agreement to vote its Preferred Shares in accordance with the foregoing sentence, does not require the Buyer to vote such shares for or against any other proposal or proposals, whether or not such other proposal or proposals are recommended by the Board of Directors.

(y) Integration. None of the Company, any of its affiliates (as defined in Rule 501(b) under the 1933 Act), or any person acting on behalf of the Company or such affiliate will sell, offer for sale, or solicit offers to buy or otherwise negotiate in respect of any security (as defined in the 1933 Act) which will be integrated with the sale of the Securities in a manner which would require the registration of the Securities under the 1933 Act, and the Company will take all action that is appropriate or necessary to assure that its offerings of other securities will not be integrated for purposes of the 1933 Act or the rules and regulations of the Principal Market, with the issuance of Securities contemplated hereby.

(z) Reserved.

(aa) Books and Records. The Company will keep proper books of record and account, in which full and correct entries shall be made of all financial transactions and the asset and business of the Company and its Subsidiaries in accordance with GAAP.

(bb) Closing Documents. On or prior to twenty (20) calendar days after the Closing Date, the Company agrees to deliver, or cause to be delivered, to each Buyer and Buyer Counsel a complete closing set of the executed Transaction Documents (which may be delivered in electronic format), Securities and any other document required to be delivered to any party pursuant to Section 7 hereof or otherwise.

(cc) Certificate of Designations. The Company shall have submitted the Certificate of Designations to the Secretary of State of the State of Delaware on or prior to the Closing Date, and shall deliver to each Holder evidence of acceptance thereof by the Secretary of State of the State of Delaware within 30 Business Days after the Closing Date. For the avoidance of doubt, between the Closing Date and the date that the Secretary of State of the State of Delaware accepts the filing of the Certificate of Designations, the Company shall honor all of the terms and conditions of the Certificate of Designations and perform all of its obligations thereunder.

5. Register; Transfer Agent Instructions; Legend.

(a) Register. The Company shall maintain at its principal executive offices (or such other office or agency of the Company as it may designate by notice to each holder of Securities), a register for the Preferred Shares and the Warrants in which the Company shall record the name and address of the Person in whose name the Preferred Shares and the Warrants have been issued (including the name and address of each transferee), the principal amount of the Preferred Shares held by such Person, the number of Conversion Shares issuable pursuant to the terms of the Preferred Shares and the number of Warrant Shares issuable upon exercise of the Warrants held by such Person. The Company shall keep the register open and available at all times during business hours for inspection of any Buyer or its legal representatives.

(b) Transfer Agent Instructions. On or prior to the Closing Date, the Company shall issue irrevocable instructions to its transfer agent and any subsequent transfer agent (as applicable, the “Transfer Agent”) in a form acceptable to each of the Buyers (the “Irrevocable Transfer Agent Instructions”) to issue certificates or credit shares (to the extent unrestricted shares are issued) to the applicable balance accounts at The Depository Trust Company (“DTC”), registered in the name of each Buyer or its respective nominee(s), for the Conversion Shares and the Warrant Shares in such amounts as specified from time to time by each Buyer to the Company upon conversion of the Preferred Shares or the exercise of the Warrants (as the case may be). The Company represents and warrants that no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 5(b), and stop transfer instructions to give effect to Section 2(g) hereof, will be given by the Company to its transfer agent with respect to the Securities, and that the Securities shall otherwise be freely transferable on the books and records of the Company, as applicable, to the extent provided in this Agreement and the other Transaction Documents. If a Buyer effects a sale, assignment or transfer of the Securities, the Company shall permit the transfer and shall promptly instruct its transfer agent to issue one or more certificates or credit shares to the applicable balance accounts at DTC in such name and in such denominations as specified by such Buyer to effect such sale, transfer or assignment. In the event that such sale, assignment or transfer involves Conversion Shares or Warrant Shares sold, assigned or transferred pursuant to an effective registration statement or in compliance with Rule 144, the transfer agent shall issue such shares to such Buyer, assignee or transferee (as the case may be) without any restrictive legend. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to a Buyer. Accordingly, the Company acknowledges

that the remedy at law for a breach of its obligations under this Section 5(b) will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section 5(b), that a Buyer shall be entitled, in addition to all other available remedies, to an order and/or injunction restraining any breach and requiring immediate issuance and transfer, without the necessity of showing economic loss and without any bond or other security being required. The Company shall cause its counsel to issue the legal opinion referred to in the Irrevocable Transfer Agent Instructions to the Company's transfer agent on each Effective Date (as defined in the Registration Rights Agreement). Any fees (with respect to the transfer agent, counsel to the Company or otherwise) associated with the issuance of such opinion or the removal of any legends on any of the Securities shall be borne by the Company.

(c) Legends. Each Buyer understands that the Securities have been issued (or will be issued in the case of the Conversion Shares and the Warrant Shares) pursuant to an exemption from registration or qualification under the 1933 Act and applicable state securities laws, and except as set forth below, the Securities shall bear any legend as required by the "blue sky" laws of any state and a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of such stock certificates):

[NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE [CONVERTIBLE] [EXERCISABLE] HAVE BEEN][THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT 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 TO THE HOLDER (IF REQUESTED BY THE COMPANY), IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD OR ELIGIBLE TO BE 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.

(d) Removal of Legends. Certificates evidencing Securities shall not be required to contain the legend set forth in Section 5(c) above or any other legend (i) while a registration statement (including a Registration Statement) covering the resale of such Securities is effective under the 1933 Act, (ii) following any sale of such Securities pursuant to Rule 144 (assuming the transferor is not an affiliate of the Company), (iii) if such Securities are eligible to be sold, assigned or transferred under Rule 144 without restriction (provided that a Buyer provides the Company with reasonable assurances that such Securities are eligible for sale, assignment or transfer under Rule 144 without restriction which shall not include an opinion of Buyer's counsel), (iv) in connection with a sale, assignment or other transfer (other than under Rule 144), provided that such Buyer provides the Company with an opinion of counsel to such Buyer, in a generally acceptable form, to the effect that such sale, assignment or transfer of the Securities may be made without registration under the applicable requirements of the 1933 Act and the Securities, as sold, assigned or transferred, need not bear a restrictive legend or (v) if such legend is not required under applicable requirements of the 1933 Act (including, without limitation, controlling judicial interpretations and pronouncements issued by the SEC). If a legend is not required pursuant to the foregoing, the Company shall no later than two (2) Trading Days (or such earlier date as required pursuant to the 1934 Act or other applicable law, rule or regulation for the settlement of a trade initiated on the date such Buyer delivers such legended certificate representing such Securities to the Company) following the delivery by a Buyer to the Company or the transfer agent (with notice to the Company) of a legended certificate representing such Securities (endorsed or with stock powers attached, signatures guaranteed, and otherwise in form necessary to affect the reissuance and/or transfer, if applicable), together with any other deliveries from such Buyer as may be required above in this Section 5(d) or as reasonably required by the Company's transfer agent or Company's counsel, as directed by such Buyer, either: (A) provided that the Company's transfer agent is participating in the DTC Fast Automated Securities Transfer Program ("FAST") and such Securities are Conversion Shares or Warrant Shares, credit the aggregate number of shares of Common Stock to which such Buyer shall be entitled to such Buyer's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system or (B) if the Company's transfer agent is not participating in FAST, issue and deliver (via reputable overnight courier) to such Buyer, a certificate representing such Securities that is free from all restrictive and other legends, registered in the name of such Buyer or its designee (the date by which such credit is so required to be made to the balance account of such Buyer's or such Buyer's designee with DTC or such certificate is required to be delivered to such Buyer pursuant to the foregoing is referred to herein as the "Required Delivery Date", and the date such shares of Common Stock are actually delivered without restrictive legend to such Buyer or such Buyer's designee with DTC, as applicable, the "Share Delivery Date"). The Company shall be responsible for any transfer agent fees or DTC fees with respect to any issuance of Securities or the removal of any legends with respect to any Securities in accordance herewith.

(e) FAST Compliance. While any Warrants remain outstanding, the Company shall maintain a transfer agent that participates in FAST.

6. Conditions to the Company's Obligation to Sell.

The obligation of the Company hereunder to issue and sell the Preferred Shares and the related Warrants to each Buyer at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, 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 by providing each Buyer with prior written notice thereof:

(a) Such Buyer shall have executed each of the other Transaction Documents to which it is a party and delivered the same to the Company.

(b) Such Buyer and each other Buyer shall have delivered to the Company the Purchase Price (less, in the case of any Buyer, the amounts withheld pursuant to Section 4(g)) for the Preferred Shares and the related Warrants being purchased by such Buyer at the Closing by wire transfer of immediately available funds in accordance with the wire instructions provided by the Company.

(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 originally made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct as of such 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 statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or Governmental Entity of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

7. Conditions to Each Buyer's Obligation to Purchase.

The obligation of each Buyer hereunder to purchase its Preferred Shares and its related Warrants at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for each Buyer's sole benefit and may be waived by such Buyer at any time in its sole discretion by providing the Company with prior written notice thereof:

(a) The Company and each Subsidiary (as the case may be) shall have duly executed and delivered to such Buyer each of the Transaction Documents to which it is a party and the Company shall have duly delivered to such Buyer (A) such aggregate number of Preferred Shares as is set forth across from such Buyer's name in column (3) of the Schedule of Buyers, (B) a Long-Term Warrant initially exercisable for such aggregate number of Warrant Shares as is set forth across from such Buyer's name in column (4) of the Schedule of Buyers and (C) a Short-Term Warrant initially exercisable for such aggregate number of Warrant Shares as is set forth across from such Buyer's name in column (5) of the Schedule of Buyers, in each case, as being purchased by such Buyer at the Closing pursuant to this Agreement; provided, however, the parties agree that no

delay in the acceptance of the Certificate of Designations by the Secretary of State of the State Delaware shall cause the conditions set forth in Section 7(a)(A) to not be satisfied and Section 7(a)(A) shall be deemed satisfied so long as the Certificate of Designations has been submitted to (and not rejected by) the Secretary of State of the State of Delaware and the Company has given irrevocable instructions to the Transfer Agent to issue the Preferred Shares upon acceptance of the Certificate of Designations by the Secretary of State of the State of Delaware.

(b) Such Buyer shall have received the opinion of Haynes and Boone, LLP, the Company's counsel, dated as of the Closing Date, addressed to each Buyer, in the form acceptable to such Buyer.

(c) The Company shall have delivered to such Buyer a copy of the Irrevocable Transfer Agent Instructions, which instructions shall have been delivered to and acknowledged in writing by the Company's transfer agent.

(d) The Company shall have delivered to such Buyer a certificate evidencing the formation and good standing of the Company in its jurisdiction of formation issued by the Secretary of State (or comparable office) of such jurisdiction of formation as of a date within ten (10) days of the Closing Date.

(e) The Company shall have delivered to such Buyer a certified copy of the Certificate of Incorporation as certified by the Delaware Secretary of State within ten (10) days of the Closing Date.

(f) The Company shall have delivered to such Buyer a certificate, in the form acceptable to such Buyer, executed by the Secretary of the Company and dated as of the Closing Date, as to (i) the resolutions consistent with Section 3(b) as adopted by the Company's board of directors in a form reasonably acceptable to such Buyer, (ii) the Certificate of Incorporation of the Company and (iii) the Bylaws of the Company as in effect at the Closing.

(g) Each and every representation and warranty of the Company shall be true and correct as of the date when made and as of the Closing Date as though originally made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct as of such specific date) and the Company shall have performed, satisfied and complied in all respects with the covenants, agreements and conditions required to be performed, satisfied or complied with by the Company at or prior to the Closing Date. Such Buyer shall have received a certificate, duly executed by the Chief Executive Officer or Chief Financial Officer of the Company, dated as of the Closing Date, to the foregoing effect.

(h) The Company shall have delivered to such Buyer a letter from the Company's transfer agent certifying the number of shares of Common Stock outstanding on the Closing Date immediately prior to the Closing.

(i) The Common Stock (A) shall be designated for quotation or listed (as applicable) on the Principal Market and (B) shall not have been suspended, as of the Closing Date, by the SEC or the Principal Market from trading on the Principal Market nor shall suspension by the SEC or the Principal Market have been threatened, as of the Closing Date, either (I) in writing by the SEC or the Principal Market or (II) by falling below the minimum maintenance requirements of the Principal Market.

(j) The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, necessary for the sale of the Securities, including without limitation, those required by the Principal Market, if any.

(k) No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or Governmental Entity of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

(l) Since the date of execution of this Agreement, no event or series of events shall have occurred that reasonably would have or result in a Material Adverse Effect, provided, however, that the definition of "Material Adverse Effect" for the purpose of this clause (xiv), will not include any change or effect that results from (A) changes in law or interpretations thereof, or regulatory policy or interpretation, by any Governmental Entity so long as such change does not have a disproportionate effect on the Company, (B) changes in applicable accounting rules or principles, including changes in GAAP, so long as such change does not have a disproportionate effect on the Company, (C) changes in general economic conditions, and events or conditions generally affecting the industries in which the Company operates, so long as such change does not have a disproportionate effect on the Company, or (D) national or international hostilities, acts of terror or acts of war.

(m) The Company shall have obtained approval of the Principal Market to list or designate for quotation (as the case may be) the Conversion Shares and the Warrant Shares.

(n) Such Buyer shall have received the wire transfer instructions of the Company.

(o) The Company and its Subsidiaries shall have delivered to such Buyer such other documents, instruments or certificates relating to the transactions contemplated by this Agreement as such Buyer or its counsel may reasonably request.

8. Termination.

This Agreement may be terminated (i) by the mutual consent of each of the Company and the Buyers, (ii) if the Closing shall not have occurred by May 30, 2024 (provided that no party shall have the right to terminate if they were the proximate cause of the failure to close by such date), or (iii) with respect to a Buyer, if the Company has breached the terms of this Agreement in a manner that would cause the failure of the conditions to closing hereunder to be met (and such breach remains uncured after 30 days' notice). Upon any termination in accordance with this Section 8 by a Buyer, such party shall have the right to terminate its obligations under this Agreement with respect to itself at any time on or after the close of business on such date (without liability of such Buyer to any other party); provided, however, the abandonment of the sale and purchase of the Preferred Shares and Warrants by such Buyer shall be applicable only to such Buyer providing such written notice, provided further that no such termination by any party shall affect any obligation of the Company under this Agreement to reimburse such Buyer for the expenses described in Section 4(g) above. Nothing contained in this Section 8 shall be deemed to release any party from any liability for any breach by such party of the terms and provisions of this Agreement or the other Transaction Documents or to impair the right of any party to compel specific performance by any other party of its obligations under this Agreement or the other Transaction Documents.

9. Miscellaneous.

(a) **Governing Law; Jurisdiction; Jury Trial.** All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or under any of the other Transaction Documents or with any transaction contemplated hereby or thereby, and hereby irrevocably waives, and agrees not to assert in any suit,

action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to operate to preclude any Buyer from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to such Buyer or to enforce a judgment or other court ruling in favor of such Buyer.

EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR UNDER ANY OTHER TRANSACTION DOCUMENT OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, ANY OTHER TRANSACTION DOCUMENT OR ANY TRANSACTION CONTEMPLATED HEREBY OR THEREBY.

(b) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which 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. In the event that any signature is delivered by facsimile or electronic transmission (including DocuSign and similar) or by an email which contains a portable document format (.pdf) file of an executed signature page, such signature page 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 signature page were an original thereof.

(c) Headings: Gender. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement. Unless the context clearly indicates otherwise, each pronoun herein shall be deemed to include the masculine, feminine, neuter, singular and plural forms thereof. The terms "including," "includes," "include" and words of like import shall be construed broadly as if followed by the words "without limitation." The terms "herein," "hereunder," "hereof" and words of like import refer to this entire Agreement instead of just the provision in which they are found.

(d) Severability: Maximum Payment Amounts. If any provision of this Agreement is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Agreement so long as this Agreement as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s). Notwithstanding anything to the contrary contained in this Agreement or any other Transaction Document (and without implication that the following is required or applicable), it is the intention of the parties that in no event shall amounts and value paid by the Company and/or any of its Subsidiaries (as the case may be), or payable to or received by any of the Buyers, under the Transaction Documents (including without limitation, any amounts that would be characterized as "interest" under applicable law) exceed amounts permitted under any applicable law. Accordingly, if any obligation to pay, payment made to any Buyer, or collection by any Buyer pursuant to the Transaction Documents is finally judicially determined to be contrary to any such applicable law, such obligation to pay, payment or collection shall be deemed to have been made by mutual mistake of such Buyer, the Company and its Subsidiaries and such amount shall be deemed to have been adjusted with retroactive effect to the maximum amount or rate of interest, as the case may be, as would not be so prohibited by the applicable law. Such adjustment shall be effected, to the extent necessary, by reducing or refunding, at the option of such Buyer, the amount of interest or any other amounts which would constitute unlawful amounts required to be paid or actually paid to such Buyer under the Transaction Documents. For greater certainty, to the extent that any interest, charges, fees, expenses or other amounts required to be paid to or received by such Buyer under any of the Transaction Documents or related thereto are held to be within the meaning of "interest" or another applicable term to otherwise be violative of applicable law, such amounts shall be pro-rated over the period of time to which they relate.

(e) Entire Agreement: Amendments. This Agreement, the other Transaction Documents and the schedules and exhibits attached hereto and thereto and the instruments referenced herein and therein supersede all other prior oral or written agreements between the Buyers, the Company, its Subsidiaries, their affiliates and Persons acting on their behalf, including, without limitation, any transactions by any Buyer with respect to shares of Common Stock or the Securities, and the other matters contained herein and therein, and this Agreement, the other Transaction Documents, the schedules and exhibits attached hereto and thereto and the instruments referenced herein and therein contain the entire understanding of the parties solely with respect to the matters covered herein and therein; provided, however, nothing contained in this Agreement or any other Transaction Document shall (or shall be deemed to) (i) have any effect on any agreements any Buyer has entered into with, or any instruments any Buyer has received from, the Company or any of its Subsidiaries prior to the date hereof with respect to any prior investment made by such Buyer in the Company or (ii) waive, alter, modify or amend in any respect any obligations of the Company or any of its Subsidiaries, or any rights of or benefits to any Buyer or any other Person, in any agreement entered into prior to the date hereof between or among the Company and/or any of its Subsidiaries and any Buyer, or any instruments any Buyer received from the Company and/or any of its Subsidiaries prior to the date hereof, and all such agreements and instruments shall continue in full force and effect. Except as specifically set forth herein or therein, neither the Company nor any Buyer makes any representation, warranty, covenant or undertaking with respect to such matters. For clarification purposes, the Recitals are part of this Agreement. No provision of this Agreement may be amended other than by an instrument in writing signed by the Company and the Required Holders (as defined below), and any amendment to any provision of this Agreement made in conformity with the provisions of this Section 9(e) shall be binding on all Buyers and holders of Securities, as applicable; provided that no such amendment shall be effective to the extent that it (A) applies to less than all of the holders of the Securities then outstanding or (B) imposes any obligation or liability on any Buyer without such Buyer's prior written consent (which may be granted or withheld in such Buyer's sole discretion). No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party, provided that the Required Holders may waive any provision of this Agreement, and any waiver of any provision of this Agreement made in conformity with the provisions of this Section 9(e) shall be binding on all Buyers and holders of Securities, as applicable, provided that no such waiver shall be effective to the extent that it (1) applies to less than all of the holders of the Securities then outstanding (unless a party gives a waiver as to itself only) or (2) imposes any obligation or liability on any Buyer without such Buyer's prior written consent (which may be granted or withheld in such Buyer's sole discretion). No consideration (other than reimbursement of legal fees) shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of the Transaction Documents unless the same consideration also is offered to all of the parties to the Transaction Documents, all holders of the Preferred Shares or all holders of the Warrants (as the case may be). From the date hereof and while any Preferred Shares or Warrants are outstanding, the Company shall not be permitted to receive any consideration from a Buyer or a holder of Preferred Shares or Warrants that is not otherwise contemplated by the Transaction Documents in order to, directly or indirectly, induce the Company or any Subsidiary (i) to treat such Buyer or holder of Preferred Shares or Warrants in a manner that is more favorable than to other similarly situated Buyers or holders of Preferred Shares or Warrants, as applicable, or (ii) to treat any Buyer(s) or holder(s) of Preferred Shares or Warrants in a manner that is less favorable than the Buyer or holder of Preferred Shares or Warrants that is paying such consideration; provided, however, that the determination of whether a Buyer has been treated more or less favorably than another Buyer shall disregard any securities of the Company purchased or sold by any Buyer. The Company has not directly or indirectly, made any agreements with any Buyers relating to the terms or conditions of the transactions contemplated by the Transaction Documents except as set forth in the Transaction Documents. Without limiting the foregoing, the Company confirms that, except as set forth in this Agreement, no Buyer has made any commitment or promise or has any other obligation to provide any financing to the Company, any Subsidiary or otherwise. As a material inducement for each Buyer to enter into this Agreement, the Company expressly acknowledges and agrees that (x) no due diligence or other investigation or inquiry conducted by a Buyer, any of its advisors or any of its representatives shall affect such Buyer's right to rely on, or shall modify or qualify in any manner or be an exception to any of, the Company's representations and warranties contained in this Agreement or any other Transaction Document and (y) unless a provision of this Agreement or any other Transaction Document is expressly preceded by the phrase "except as disclosed in the SEC Documents," nothing contained in any of the SEC Documents shall affect such Buyer's right to rely on, or shall modify or qualify in any manner or be an exception to any of, Company's representations and warranties contained in this Agreement or any other Transaction Document. "Required Holders" means (I) prior to the Closing Date, each Buyer entitled to purchase, in the aggregate, at least a majority of the number of Preferred Shares at the Closing and (II) on or after the Closing Date, holders of a majority of the Preferred Shares then outstanding.

(f) Notices. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by electronic mail (provided that such sent email is kept on file (whether electronically or otherwise) by the sending party and the sending party does not receive an automatically generated message from the recipient's email server that such email could not be delivered to such recipient); or (iii) one (1) Business Day after deposit with an overnight courier service with next day delivery specified, in each case, properly addressed to the party to receive the same. The mailing addresses and email addresses for such communications shall be:

If to the Company:

MyMD Pharmaceuticals, Inc.
855 N. Wolfe Street, Suite 623
Baltimore, MD 21205
Attention: Christopher C. Chapman
Telephone: (856) 848-8698
Email: ccchapman@mymd.com

With a copy (for informational purposes only) to:

Haynes and Boone, LLP
30 Rockefeller Plaza, 26th Floor
New York, New York 10112
Telephone: (212) 659-7300
Attention: Rick Werner
Email: rick.werner@haynesboone.com

If to the Transfer Agent:

Securities Transfer Corporation
N. Dallas Parkway
Suite 380
Plano, Texas 75093

If to a Buyer, to its mailing address and email address set forth on the Schedule of Buyers, with copies to such Buyer's representatives as set forth on the Schedule of Buyers,

with a copy (for informational purposes only) to:

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
919 Third Avenue
New York, New York 10022
Telephone: (212) 935-3000
Attention: Jeffrey P. Schultz, Esq.
E-mail: jschultz@mintz.com

or to such other mailing address and/or email address and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change, provided that Buyer Counsel shall only be provided copies of notices sent to the lead Buyer. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's email containing the time, date and recipient's email or (C) provided by an overnight courier service shall be rebuttable evidence of personal service, receipt by email or receipt from an overnight courier service in accordance with clause (i), (ii) or (iii) above, respectively.

(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns, including any purchasers of any of the Preferred Shares and Warrants. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Required Holders, including, without limitation, by way of a Fundamental Transaction (as defined in the Warrants) (unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Warrants) or a Fundamental Transaction (as defined in the Certificate of Designations) (unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Certificate of Designations). A Buyer may assign some or all of its rights hereunder in connection with any transfer of any of its Securities without the consent of the Company, in which event such assignee shall be deemed to be a Buyer hereunder with respect to such assigned rights.

(h) No 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, other than the Indemnitees referred to in Section 9(k) and the Placement Agents.

(i) Survival. The representations, warranties, agreements and covenants shall survive the Closing. Each Buyer shall be responsible only for its own representations, warranties, agreements and covenants hereunder.

(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 any 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) Indemnification. In consideration of each Buyer's execution and delivery of the Transaction Documents and acquiring the Securities thereunder and in addition to all of the Company's other obligations under the Transaction Documents, the Company shall defend, protect, indemnify and hold harmless each Buyer and each holder of any Securities and all of their 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 (i) any misrepresentation or breach of any representation or warranty made by the Company or any Subsidiary in any of the Transaction Documents, (ii) any breach of any covenant, agreement or obligation of the Company or any Subsidiary contained in any of the Transaction Documents or (iii) any cause of action, suit, proceeding 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 or any Subsidiary) or which otherwise involves such Indemnitee that arises out of or results from (A) the execution, delivery, performance or enforcement of any of the Transaction Documents, (B) any transaction financed or to be financed in whole or in part, directly or indirectly, with the proceeds of the issuance of the Securities, (C) any disclosure properly made by such Buyer pursuant to Section 4(i), or (D) the status of such Buyer or holder of the Securities

either as an investor in the Company pursuant to the transactions contemplated by the Transaction Documents or as a party to this Agreement (including, without limitation, as a party in interest or otherwise in any action or proceeding for injunctive or other equitable relief). 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 which is permissible under applicable law. Except as otherwise set forth herein, the mechanics and procedures with respect to the rights and obligations under this Section 9(k) shall be the same as those set forth in Section 6 of the Registration Rights Agreement.

(l) 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. No specific representation or warranty shall limit the generality or applicability of a more general representation or warranty. Each and every reference to share prices, shares of Common Stock and any other numbers in this Agreement that relate to the shares of Common Stock shall be automatically adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions that occur with respect to the Common Stock after the date of this Agreement. Notwithstanding anything in this Agreement to the contrary, for the avoidance of doubt, nothing contained herein shall constitute a representation or warranty against, or a prohibition of, any actions with respect to the borrowing of, arrangement to borrow, identification of the availability of, and/or securing of, securities of the Company in order for such Buyer (or its broker or other financial representative) to effect short sales or similar transactions in the future.

(m) Remedies. Each Buyer and in the event of assignment by Buyer of its rights and obligations hereunder, each holder of Securities, shall have all rights and remedies set forth in the Transaction Documents and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which such holders have under any law. Any Person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any breach of any provision of this Agreement and to exercise all other rights granted by law. Furthermore, the Company recognizes that in the event that it or any Subsidiary fails to perform, observe, or discharge any or all of its or such Subsidiary's (as the case may be) obligations under the Transaction Documents, any remedy at law would inadequate relief to the Buyers. The Company therefore agrees that the Buyers shall be entitled to specific performance and/or temporary, preliminary and permanent injunctive or other equitable relief from any court of competent jurisdiction in any such case without the necessity of proving actual damages and without posting a bond or other security. The remedies provided in this Agreement and the other Transaction Documents shall be cumulative and in addition to all other remedies available under this Agreement and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief).

(n) Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) the Transaction Documents, whenever any Buyer exercises a right, election, demand or option under a Transaction Document and the Company or any Subsidiary does not timely perform its related obligations within the periods therein provided, then such Buyer may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company or such Subsidiary (as the case may be), any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights.

(o) Payment Set Aside; Currency. To the extent that the Company makes a payment or payments to any Buyer hereunder or pursuant to any of the other Transaction Documents or any of the Buyers enforce or exercise their rights hereunder or thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, foreign, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred. Unless otherwise expressly indicated, all dollar amounts referred to in this Agreement and the other Transaction Documents are in United States Dollars ("U.S. Dollars"), and all amounts owing under this Agreement and all other Transaction Documents shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. "Exchange Rate" means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Agreement, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation.

(p) Judgment Currency.

- a. If for the purpose of obtaining or enforcing judgment against the Company in connection with this Agreement or any other Transaction Document in any court in any jurisdiction it becomes necessary to convert into any other currency (such other currency being hereinafter in this Section 9(p) referred to as the "Judgment Currency") an amount due in US Dollars under this Agreement, the conversion shall be made at the Exchange Rate prevailing on the Trading Day immediately preceding:
 - i. the date actual payment of the amount due, in the case of any proceeding in the courts of New York or in the courts of any other jurisdiction that will give effect to such conversion being made on such date: or
 - ii. the date on which the foreign court determines, in the case of any proceeding in the courts of any other jurisdiction (the date as of which such conversion is made pursuant to this Section 9(p)(i)(2) being hereinafter referred to as the "Judgment Conversion Date").

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- b. If in the case of any proceeding in the court of any jurisdiction referred to in Section 9(p)(i)(2) above, there is a change in the Exchange Rate prevailing between the Judgment Conversion Date and the date of actual payment of the amount due, the applicable party shall pay such adjusted amount as may be necessary to ensure that the amount paid in the Judgment Currency, when converted at the Exchange Rate prevailing on the date of payment, will produce the amount of US Dollars which could have been purchased with the amount of Judgment Currency stipulated in the judgment or judicial order at the Exchange Rate prevailing on the Judgment Conversion Date.
 - c. Any amount due from the Company under this provision shall be due as a separate debt and shall not be affected by judgment being obtained for any other amounts due under or in respect of this Agreement or any other Transaction Document.

(q) Independent Nature of Buyers' Obligations and Rights. The obligations of each Buyer under the Transaction Documents are several and not joint with the obligations of any other Buyer, and no Buyer shall be responsible in any way for the performance of the obligations of any other Buyer under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Buyer pursuant hereto or thereto, shall be deemed to constitute the Buyers as, and the Company each acknowledge that the Buyers do not so constitute, a partnership, an association, a joint venture or any other kind of group or entity, or create a presumption that the Buyers are in any way acting in concert or as a group or entity, and the Company shall not assert any such claim with respect to such obligations or the transactions contemplated by the Transaction Documents or any matters, and the Company acknowledges that the Buyers are not acting in concert or as a group, and the Company shall not assert any such claim, with respect to such obligations or the transactions contemplated by the Transaction Documents. The decision of each Buyer to purchase Securities pursuant to the Transaction Documents has been made by such Buyer independently of any other Buyer. Each Buyer acknowledges that no other Buyer has acted as agent for such Buyer in connection with such Buyer making its investment hereunder and that no other Buyer will be acting as agent of such Buyer in connection with monitoring such Buyer's investment in the Securities or enforcing its rights under the Transaction Documents. The Company and each Buyer confirms that each Buyer has independently participated with the Company and its Subsidiaries in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Buyer shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of any other Transaction Documents, and it shall not be necessary for any other Buyer to be joined as an additional party in any proceeding for such purpose. The use of a single agreement to effectuate the purchase and sale of the Securities contemplated hereby was solely in the control of the Company, not the action or decision of any Buyer, and was done solely for the convenience of the

Company and its Subsidiaries and not because it was required or requested to do so by any Buyer. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company, each Subsidiary and a Buyer, solely, and not between the Company, its Subsidiaries and the Buyers collectively and not between and among the Buyers.

[Signature pages follow.]

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Agreement to be duly executed as of the date first written above.

COMPANY:

MYMD PHARMACEUTICALS, INC.

Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Agreement to be duly executed as of the date first written above.

BUYER:

Name:
Title:

SCHEDULE OF BUYERS

REGISTRATION RIGHTS AGREEMENT

This **REGISTRATION RIGHTS AGREEMENT** (this “**Agreement**”), dated as of May 20, 2024, is by and among MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), and the undersigned buyers (each, a “**Buyer**,” and collectively, the “**Buyers**”).

RECITALS

A. In connection with the Securities Purchase Agreement by and among the parties hereto, dated as of May 20, 2024 (the “**Securities Purchase Agreement**”), the Company has agreed, upon the terms and subject to the conditions of the Securities Purchase Agreement, to issue and sell to each Buyer (i) the Preferred Shares (as defined in the Securities Purchase Agreement) which will be convertible into Conversion Shares (as defined in the Securities Purchase Agreement) in accordance with the terms of the Certificate of Designations (as defined in the Securities Purchase Agreement) and (ii) the Warrants (as defined in the Securities Purchase Agreement), which will be exercisable to purchase Warrant Shares (as defined in the Securities Purchase Agreement) in accordance with the terms of the Warrants.

B. To induce the Buyers to consummate the transactions contemplated by the Securities Purchase Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the “**1933 Act**”), and applicable state securities laws.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and each of the Buyers hereby agree as follows:

1. Definitions.

Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Securities Purchase Agreement. As used in this Agreement, the following terms shall have the following meanings:

(a) “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(b) “**Closing Date**” shall have the meaning set forth in the Securities Purchase Agreement.

(c) “**Effective Date**” means the date that the applicable Registration Statement has been declared effective by the SEC.

(d) “**Effectiveness Deadline**” means (i) with respect to the initial Registration Statement required to be filed pursuant to Section 2(a), the earlier of the (A) 90th calendar day after the Closing Date (or, in the event of a “full review” by the SEC, the 120th calendar day after the Closing Date) and (B) 2nd Business Day after the date the Company is notified (orally or in writing, whichever is earlier) by the SEC that such Registration Statement will not be reviewed or will not be subject to further review and (ii) with respect to any additional Registration Statements which may be required hereunder, the 90th calendar day following the date on which an additional Registration Statement is required to be filed hereunder (or, in the event of a “full review” by the SEC, the 120th calendar day following the date such additional Registration Statement is required to be filed hereunder), 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.

(e) “**Filing Deadline**” means (i) with respect to the initial Registration Statement required to be filed pursuant to Section 2(a), the 30th calendar day after the Closing Date and (ii) with respect to any additional Registration Statements that may be required to be filed by the Company pursuant to this Agreement, the date on which the Company was required to file such additional Registration Statement pursuant to the terms of this Agreement.

(f) “**Investor**” means a Buyer or any transferee or assignee of any Registrable Securities, Preferred Shares or Warrants, as applicable, to whom a Buyer assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9 and any transferee or assignee thereof to whom a transferee or assignee of any Registrable Securities, Preferred Shares or Warrants, as applicable, assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9.

(g) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization or a government or any department or agency thereof.

(h) “**register**,” “**registered**,” and “**registration**” refer to a registration effected by preparing and filing one or more Registration Statements in compliance with the 1933 Act and pursuant to Rule 415 and the declaration of effectiveness of such Registration Statement(s) by the SEC.

(i) “**Registrable Securities**” means (i) the Conversion Shares, (ii) the PIK Conversion Shares, (iii) the Warrant Shares, and (iv) any capital stock of the Company issued or issuable with respect to the Conversion Shares, the Warrant Shares, the Preferred Shares or the Warrants, including, without limitation, (1) as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise and (2) any capital stock of the Company into which the shares of Common Stock (as defined in the Certificate of Designations) are converted or exchanged and capital stock of a Successor Entity (as defined in the Warrants) into which the shares of Common Stock are converted or exchanged, in each case, without regard to any limitations on conversion of the Preferred Shares or exercise of the Warrants; provided, however, that any such Registrable 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 (a) a Registration Statement with respect to the sale of such Registrable Securities is declared effective by the SEC under the 1933 Act and such Registrable Securities have been disposed of by the Investor in accordance with such effective Registration Statement, (b) such Registrable Securities have been previously sold in accordance with Rule 144, or (c) 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 Company’s transfer agent and the affected Investors (assuming that such securities and any securities issuable upon exercise, conversion or exchange 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).

(j) “**Registration Statement**” means a registration statement or registration statements of the Company filed under the 1933 Act covering Registrable Securities.

(k) “**Required Holders**” shall have the meaning as set forth in the Securities Purchase Agreement.

(l) **“Required Registration Amount”** means, as of any time of determination, the sum of (i) 200% of the maximum number of Conversion Shares issuable upon conversion of the Preferred Shares ((x) assuming for purposes hereof that the Preferred Shares are convertible at the initial Conversion Price (as defined in the Certificate of Designations) and (y) any such conversion shall not take into account any limitations on the conversion of the Preferred Shares set forth in the Certificate of Designations), (ii) 200% of the maximum number of PIK Conversion Shares issuable upon conversion of the PIK Preferred Shares ((x) assuming for purposes hereof that the Preferred Shares are convertible at the initial Conversion Price and (y) any such conversion shall not take into account any limitations on the conversion of the Preferred Shares set forth in the Certificate of Designations) and (iii) 200% of the maximum number of Warrant Shares issuable upon exercise of the Warrants (without taking into account any limitations on the exercise of the Warrants set forth therein), all subject to adjustment as provided in Section 2(d) and/or Section 2(f).

(m) **“Rule 144”** means Rule 144 promulgated by the SEC 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 SEC that may at any time permit the Investors to sell securities of the Company to the public without registration.

(n) **“Rule 415”** means Rule 415 promulgated by the SEC 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 SEC providing for offering securities on a continuous or delayed basis.

(o) **“SEC”** means the United States Securities and Exchange Commission or any successor thereto.

2. Registration.

(a) Mandatory Registration. The Company shall prepare and, as soon as practicable, but in no event later than the Filing Deadline, file with the SEC an initial Registration Statement on Form S-3 covering the resale of all of the Registrable Securities, provided that such initial Registration Statement shall register for resale at least the number of shares of Common Stock equal to the Required Registration Amount as of the date such Registration Statement is initially filed with the SEC; provided further that if Form S-3 is unavailable for such a registration, the Company shall use such other form as is required by Section 2(c). Such initial Registration Statement, and each other Registration Statement required to be filed pursuant to the terms of this Agreement, shall contain (except if otherwise directed by the Required Holders) the **“Selling Stockholders”** and **“Plan of Distribution”** sections in substantially the form attached hereto as **Exhibit A** and **Exhibit B**, respectively. The Company shall use its reasonable best efforts to have such initial Registration Statement, and each other Registration Statement required to be filed pursuant to the terms of this Agreement, declared effective by the SEC as soon as practicable, but in no event later than the applicable Effectiveness Deadline for such Registration Statement.

(b) Legal Counsel. Subject to Section 5 hereof, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel solely to PharmaCyte Biotech, Inc. (**“Legal Counsel”**), shall be provided a copy of any registration, solely on behalf of the lead investor, pursuant to this Section 2.

(c) Ineligibility to Use Form S-3. In the event that Form S-3 is not available for the registration of the resale of Registrable Securities hereunder, the Company shall (i) register the resale of the Registrable Securities on Form S-1 or another appropriate form reasonably acceptable to the Required Holders and (ii) undertake to register the resale of the Registrable Securities on Form S-3 as soon as such form is available, provided that the Company shall maintain the effectiveness of all Registration Statements then in effect until such time as a Registration Statement on Form S-3 covering the resale of all the Registrable Securities has been declared effective by the SEC and the prospectus contained therein is available for use.

(d) Sufficient Number of Shares Registered. In the event the number of shares available under any Registration Statement is insufficient to cover all of the Registrable Securities required to be covered by such Registration Statement or an Investor’s allocated portion of the Registrable Securities pursuant to Section 2(h), the Company shall amend such Registration Statement (if permissible), or file with the SEC a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover at least the Required Registration Amount less any securities that are no longer Registrable Securities (as of the Trading Day immediately preceding the date of the filing of such amendment or new Registration Statement, in each case, as soon as practicable. The Company shall use its reasonable best efforts to cause such amendment to such Registration Statement and/or such new Registration Statement (as the case may be) to become effective as soon as practicable following the filing thereof with the SEC, but in no event later than the applicable Effectiveness Deadline for such Registration Statement. For purposes of the foregoing provision, the number of shares available under a Registration Statement shall be deemed “insufficient to cover all of the Registrable Securities” if at any time the number of shares of Common Stock available for resale under the applicable Registration Statement is less than the Required Registration Amount as of such time. The calculation set forth in the foregoing sentence shall be made without regard to any limitations on conversion, amortization and/or redemption of the Preferred Shares or exercise of the Warrants (and such calculation shall assume (A) that the Preferred Shares are then convertible in full into shares of Common Stock at the initial Conversion Price (as defined in the Certificate of Designations), and (B) the Warrants are then exercisable in full into shares of Common Stock at the then prevailing Exercise Price (as defined in the Warrants)).

(e) [Reserved]

(f) Offering. Notwithstanding anything to the contrary contained in this Agreement, in the event the staff of the SEC (the **“Staff”**) or the SEC seeks to characterize any offering pursuant to a Registration Statement filed pursuant to this Agreement as constituting an offering of securities by, or on behalf of, the Company, or in any other manner, such that the Staff or the SEC does not permit such Registration Statement to become effective and used for resales in a manner that does not constitute such an offering and that permits the continuous resale at the market by the Investors participating therein (or as otherwise may be acceptable to each Investor) without being named therein as an “underwriter,” then the Company shall reduce the number of shares to be included in such Registration Statement by all Investors until such time as the Staff and the SEC shall so permit such Registration Statement to become effective as aforesaid. In making such reduction, the Company shall reduce the number of shares to be included by all Investors on a pro rata basis (based upon the number of Registrable Securities otherwise required to be included for each Investor) unless the inclusion of shares by a particular Investor or a particular set of Investors are resulting in the Staff or the SEC’s “by or on behalf of the Company” offering position, in which event the shares held by such Investor or set of Investors shall be the only shares subject to reduction (and if by a set of Investors on a pro rata basis by such Investors or on such other basis as would result in the exclusion of the least number of shares by all such Investors); provided, that, with respect to such pro rata portion allocated to any Investor, such Investor may elect the allocation of such pro rata portion among the Registrable Securities of such Investor. In addition, in the event that the Staff or the SEC requires any Investor seeking to sell securities under a Registration Statement filed pursuant to this Agreement to be specifically identified as an “underwriter” in order to permit such Registration Statement to become effective, and such Investor does not consent to being so named as an underwriter in such Registration Statement, then, in each such case, the Company shall reduce the total number of Registrable Securities to be registered on behalf of such Investor, until such time as the Staff or the SEC does not require such identification or until such Investor accepts such identification and the manner thereof. Any reduction pursuant to this paragraph will first reduce all Registrable Securities other than those issued pursuant to the Securities Purchase Agreement. In the event of any reduction in Registrable Securities pursuant to this paragraph, an affected Investor shall have the right to require, upon delivery of a written request to the Company signed by such Investor, the Company to file a registration statement within twenty (20) days of such request (subject to any restrictions imposed by Rule 415 or required by the Staff or the SEC) for resale by such Investor in a manner acceptable to such Investor, and the Company shall follow such request cause to be and keep effective such registration statement in the same manner as otherwise contemplated in this Agreement for registration statements hereunder, in each case until such time as: (i) all Registrable Securities held by such Investor have been registered and sold pursuant to an effective Registration Statement in a manner acceptable to such Investor or (ii) all Registrable Securities may be resold by such Investor without restriction (including, without limitation, volume limitations) pursuant to Rule 144 (taking account of any Staff position with respect to “affiliate” status) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable) or (iii) such Investor agrees to be named as an underwriter in any such Registration Statement in a manner acceptable to such Investor as to all Registrable Securities held by such Investor and that have not theretofore been included in a Registration Statement under this Agreement (it being understood that the special demand right under this sentence may be exercised by an Investor multiple times and with respect to limited amounts of Registrable Securities in order to permit the resale thereof by such Investor as contemplated above).

(g) Piggyback Registrations. Without limiting any obligation of the Company hereunder or under the Securities Purchase Agreement, if there is not an effective Registration Statement covering all of the Registrable Securities or the prospectus contained therein is not available for use and the Company shall determine to prepare and file with the SEC a registration statement or offering statement relating to an offering for its own account or the account of others under the 1933 Act of any of its equity securities (other than on Form S-4 or Form S-8 (each as promulgated under the 1933 Act) or their then equivalents relating to equity securities to be issued solely in connection with any acquisition of any entity or business or equity securities issuable in connection with the Company's share option or other employee benefit plans), then the Company shall deliver to each Investor a written notice of such determination and, if within ten (10) days after the date of the delivery of such notice, any such Investor shall so request in writing, the Company shall include in such registration statement or offering statement all or any part of such Registrable Securities such Investor requests to be registered; provided, however, the Company shall not be required to register any Registrable Securities pursuant to this Section 2(g) that are eligible for resale pursuant to Rule 144 without restriction (including, without limitation, volume restrictions) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable) or that are the subject of a then-effective Registration Statement.

(h) Allocation of Registrable Securities. The initial number of Registrable Securities included in any Registration Statement and any increase in the number of Registrable Securities included therein shall be allocated pro rata among the Investors based on the number of Registrable Securities held by each Investor at the time such Registration Statement covering such initial number of Registrable Securities or increase thereof is declared effective by the SEC. In the event that an Investor sells or otherwise transfers any of such Investor's Registrable Securities, each transferee or assignee (as the case may be) that becomes an Investor shall be allocated a pro rata portion of the then-remaining number of Registrable Securities included in such Registration Statement for such transferor or assignee (as the case may be). Any shares of Common Stock included in a Registration Statement and which remain allocated to any Person which ceases to hold any Registrable Securities covered by such Registration Statement shall be allocated to the remaining Investors, pro rata based on the number of Registrable Securities then held by such Investors which are covered by such Registration Statement.

(i) No Inclusion of Other Securities. The Company shall in no event include any securities other than Registrable Securities on any Registration Statement filed in accordance herewith without the prior written consent of the Required Holders. Until the Applicable Date (as defined in the Securities Purchase Agreement), the Company shall not enter into any agreement providing any registration rights to any of its security holders, except as otherwise permitted under the Securities Purchase Agreement.

3. Related Obligations.

The Company shall use its reasonable best efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof, and, pursuant thereto, the Company shall have the following obligations:

(a) The Company shall promptly prepare and file with the SEC a Registration Statement with respect to all the Registrable Securities (but in no event later than the applicable Filing Deadline) and use its reasonable best efforts to cause such Registration Statement to become effective as soon as practicable after such filing (but in no event later than the Effectiveness Deadline). Subject to Allowable Grace Periods, the Company shall keep each Registration Statement effective (and the prospectus contained therein available for use) pursuant to Rule 415 for resales by the Investors on a delayed or continuous basis at then-prevailing market prices (and not fixed prices) at all times until the earlier of (i) the date as of which all of the Investors may sell all of the Registrable Securities required to be covered by such Registration Statement (disregarding any reduction pursuant to Section 2(f) without restriction pursuant to Rule 144 (including, without limitation, volume restrictions) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable), (ii) the date on which the Investors shall have sold all of the Registrable Securities covered by such Registration Statement or (iii) the five (5) year anniversary of the Closing Date (the "**Registration Period**"). Notwithstanding anything to the contrary contained in this Agreement, the Company shall ensure that, when filed and at all times while effective, each Registration Statement (including, without limitation, all amendments and supplements thereto) and the prospectus (including, without limitation, all amendments and supplements thereto) used in connection with such Registration Statement shall not contain any 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 the case of prospectuses, in the light of the circumstances in which they were made) not misleading. The Company shall submit to the SEC, within two (2) Business Days after the date that the Company learns that no review of a particular Registration Statement will be made by the Staff or that the Staff has no further comments on a particular Registration Statement (as the case may be), a request for acceleration of effectiveness of such Registration Statement to a time and date not later than two (2) Business Days after the submission of such request (but taking account of any Staff position with respect to the date on which the Staff will permit such request for acceleration to be filed with the SEC). The Company shall respond in writing to comments made by the SEC in respect of a Registration Statement as soon as practicable that an amendment is required in order for a Registration Statement to be declared effective.

(b) Subject to Section 3(r) of this Agreement, the Company shall prepare and file with the SEC such amendments (including, without limitation, post-effective amendments) and supplements to each Registration Statement and the prospectus used in connection with each such Registration Statement, which prospectus is to be filed pursuant to Rule 424 promulgated under the 1933 Act, as may be necessary to keep each such Registration Statement effective at all times during the Registration Period for such Registration Statement, and, during such period, comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Securities of the Company required to be covered by such Registration Statement until the end of the Registration Period; provided, however, by the second Business Day immediately following each Effective Date, the Company shall file with the SEC in accordance with Rule 424(b) under the 1933 Act the final prospectus to be used in connection with sales pursuant to the applicable Registration Statement (whether or not such a prospectus is technically required by such rule). In the case of amendments and supplements to any Registration Statement which are required to be filed pursuant to this Agreement (including, without limitation, pursuant to this Section 3(b)) by reason of the Company filing a Current Report on Form 8-K, an Annual Report on Form 10-K, a Quarterly Report on Form 10-Q or any analogous report under the Securities Exchange Act of 1934, as amended (the "**1934 Act**"), the Company shall, if permitted under the applicable rules and regulations of the SEC, have incorporated such report by reference into such Registration Statement, if applicable, or shall file such amendments or supplements with the SEC on the same day on which the 1934 Act report is filed which created the requirement for the Company to amend or supplement such Registration Statement.

(c) The Company shall permit each Investor to review and comment upon (i) each Registration Statement at least three (3) days prior to its filing with the SEC and (ii) all amendments and supplements to each Registration Statement (including, without limitation, the prospectus contained therein) (except for Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and any similar or successor reports) within a reasonable number of days prior to their filing with the SEC, and (B) not file any Registration Statement or amendment or supplement thereto in a form to which such Investor reasonably objects; provided, that the Company shall not have any obligation to modify any information if the Company reasonably expects that so doing would cause (i) the Registration Statement to contain an 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 not misleading or (ii) any prospectus contained therein to contain an untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading. The Company shall promptly furnish to each Investor, without charge, (i) copies of any correspondence from the SEC or the Staff to the Company or its representatives relating to each Registration Statement, provided that such correspondence shall not contain any material, non-public information regarding the Company or any of its Subsidiaries (as defined in the Securities Purchase Agreement), (ii) after the same is prepared and filed with the SEC, one (1) copy of each Registration Statement and any amendment(s) and supplement(s) thereto, including, without limitation, financial statements and schedules, all documents incorporated therein by reference, if requested by an Investor, and all exhibits and (iii) upon the effectiveness of each Registration Statement, one (1) copy of the prospectus included in such Registration Statement and all amendments and supplements thereto, provided, that any such item which is available on the EDGAR system (or successor thereto) need not be furnished. The Company shall reasonably cooperate with each Investor in performing the Company's obligations pursuant to this Section 3.

(d) The Company shall promptly furnish to each Investor whose Registrable Securities are included in any Registration Statement, without charge, (i) after the

same is prepared and filed with the SEC, at least one (1) copy of each Registration Statement and any amendment(s) and supplement(s) thereto, including, without limitation, financial statements and schedules, all documents incorporated therein by reference, if requested by an Investor, all exhibits and each preliminary prospectus, provided, that any such item which is available on the EDGAR system (or successor thereto) need not be furnished.

(e) The Company shall use its reasonable best efforts to (i) register and qualify, unless an exemption from registration and qualification applies, the resale by Investors of the Registrable Securities covered by a Registration Statement under such other securities or “blue sky” laws of all applicable jurisdictions in the United States, (ii) prepare and file in those jurisdictions, such amendments (including, without limitation, post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions; provided, however, the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(e), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify Legal Counsel, legal counsel for each other Investor and each Investor who holds Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or “blue sky” laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

(f) The Company shall notify each Investor in writing of the happening of any event, as promptly as practicable after becoming aware of such event, as a result of which the prospectus included in a Registration Statement, as then in effect, may include an untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (provided that in no event shall such notice contain any material, non-public information regarding the Company or any of its Subsidiaries), and, subject to Section 3(r), promptly prepare a supplement or amendment to such Registration Statement and such prospectus contained therein to correct such untrue statement or omission and deliver one (1) copy of such supplement or amendment to each Investor, provided, that any such item which is available on the EDGAR system (or successor thereto) need not be furnished. The Company shall also promptly notify each Investor in writing (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to each Investor by e-mail on the same day of such effectiveness and by overnight mail), and when the Company receives written notice from the SEC that a Registration Statement or any post-effective amendment will be reviewed by the SEC, (ii) of any request by the SEC for amendments or supplements to a Registration Statement or related prospectus or related information, (iii) of the Company’s reasonable determination that a post-effective amendment to a Registration Statement would be appropriate; and (iv) of the receipt of any request by the SEC or any other federal or state governmental authority for any additional information relating to the Registration Statement or any amendment or supplement thereto or any related prospectus. The Company shall respond as promptly as practicable to any comments received from the SEC with respect to each Registration Statement or any amendment thereto.

(g) The Company shall (i) use its reasonable best efforts to prevent the issuance of any stop order or other suspension of effectiveness of each Registration Statement or the use of any prospectus contained therein, or the suspension of the qualification, or the loss of an exemption from qualification, of any of the Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and (ii) notify each Investor who holds Registrable Securities of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

(h) [Reserved]

(i) [Reserved]

(j) The Company shall hold in confidence and not make any disclosure of information concerning an Investor provided to the Company unless (i) disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement or is otherwise required to be disclosed in such Registration Statement pursuant to the 1933 Act, (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other Transaction Document. The Company agrees that it shall, upon learning that disclosure of such information concerning an Investor is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to such Investor and allow such Investor, at such Investor’s expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

(k) Without limiting any obligation of the Company under the Securities Purchase Agreement, the Company shall use its reasonable best efforts either to (i) cause all of the Registrable Securities covered by each Registration Statement to be listed on each securities exchange on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange, or (ii) secure designation and quotation of all of the Registrable Securities covered by each Registration Statement on an Eligible Market (as defined in the Securities Purchase Agreement). In addition, the Company shall cooperate with each Investor and any broker or dealer through which any such Investor proposes to sell its Registrable Securities in effecting a filing with the Financial Industry Regulatory Authority (“FINRA”) pursuant to FINRA Rule 5110 as requested by such Investor. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 3(k).

(l) The Company shall cooperate with the Investors who hold Registrable Securities being offered and, to the extent applicable, facilitate the timely preparation and delivery of certificates (not bearing any restrictive legend) representing the Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such denominations or amounts (as the case may be) as the Investors may reasonably request from time to time and registered in such names as the Investors may request.

(m) If requested by an Investor, the Company shall as soon as practicable after receipt of notice from such Investor and subject to Section 3(r) hereof, (i) incorporate in a prospectus supplement or post-effective amendment such information as an Investor reasonably requests to be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering; (ii) make all required filings of such prospectus supplement or post-effective amendment after being notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) supplement or make amendments to any Registration Statement or prospectus contained therein if reasonably requested by an Investor holding any Registrable Securities.

(n) [Reserved]

(o) [Reserved]

(p) [Reserved]

(q) Within three (3) Business Days after a Registration Statement which covers Registrable Securities is declared effective by the SEC, the Company shall deliver, and shall cause legal counsel for the Company to deliver, to the transfer agent for such Registrable Securities (with copies to the Investors whose Registrable Securities are included in such Registration Statement) confirmation that such Registration Statement has been declared effective by the SEC in the form acceptable to the Transfer Agent.

(r) Notwithstanding anything to the contrary herein (but subject to the last sentence of this Section 3(r)), at any time after the Effective Date of a particular Registration Statement, the Company may delay the disclosure of material, non-public information concerning the Company or any of its Subsidiaries the disclosure of which at the time is not, in the good faith opinion of the board of directors of the Company, in the best interest of the Company and, in the opinion of counsel to the Company, otherwise required (a “**Grace Period**”), provided that the Company shall promptly notify the Investors in writing of the (i) existence of material, non-public information giving rise to a Grace Period (provided that in each such notice the Company shall not disclose the content of such material, non-public information to any of the Investors) and the date on which such Grace Period will begin and (ii) date on which such Grace Period ends, provided further that (I) no Grace Period shall exceed fifteen (15) consecutive days and during any three hundred sixty five (365) day period all such Grace Periods shall not exceed an aggregate of thirty (30) days and (II) the first day of any Grace Period must be at least five (5) Trading Days after the last day of any prior Grace Period (each, an “**Allowable Grace Period**”). For purposes of determining the length of a Grace Period above, such Grace Period shall begin on and include the date the Investors receive the notice referred to in clause (i) above and shall end on and include the later of the date the Investors receive the notice referred to in clause (ii) above and the date referred to in such notice. The provisions of Section 3(g) hereof shall not be applicable during the period of any Allowable Grace Period. Upon expiration of each Grace Period, the Company shall again be bound by the first sentence of Section 3(f) with respect to the information giving rise thereto unless such material, non-public information is no longer applicable.

(s) [Reserved]

(t) [Reserved]

(u) Neither the Company nor any of its Subsidiaries has entered, as of the date hereof, nor shall the Company or any of its Subsidiaries, on or after the date of this Agreement, enter into any agreement with respect to its securities, that would have the effect of impairing the rights granted to the Buyers in this Agreement or otherwise conflicts with the provisions hereof.

4. Obligations of the Investors.

(a) At least three (3) Business Days prior to the first anticipated filing date of each Registration Statement, the Company shall notify each Investor in writing of the information the Company requires from each such Investor with respect to such Registration Statement. It shall be a condition precedent to the obligations of the Company to complete the registration pursuant to this Agreement with respect to the Registrable Securities of a particular Investor that such Investor shall furnish to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it, as shall be reasonably required to effect and maintain the effectiveness of the registration of such Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request within 2 Business Days of such notice.

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

(c) Each Investor agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(g) or the first sentence of Section 3(f), such Investor will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until such Investor’s receipt of the copies of the supplemented or amended prospectus contemplated by Section 3(g) or the first sentence of Section 3(f) or receipt of notice that no supplement or amendment is required. Notwithstanding anything to the contrary in this Section 4(c) and subject to applicable law, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of an Investor in accordance with the terms of the Securities Purchase Agreement in connection with any sale of Registrable Securities with respect to which such Investor has entered into a contract for sale prior to the Investor’s receipt of a notice from the Company of the happening of any event of the kind described in Section 3(g) or the first sentence of Section 3(f) and for which such Investor has not yet settled.

5. Expenses of Registration.

All reasonable expenses, other than underwriting discounts and commissions, incurred in connection with registrations, filings or qualifications pursuant to Sections 2 and 3, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, FINRA filing fees (if any) and fees and disbursements of counsel for the Company shall be paid by the Company. In no event shall the Company be responsible for any broker or similar commissions of any Investor or, except to the extent expressly provided for in the Transaction Documents, any legal fees or other costs of the Investors.

6. Indemnification.

(a) To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend each Investor and each of its directors, officers, stockholders, members, partners, employees, agents, advisors, representatives (each, an “**Indemnified Person**”), against any losses, obligations, claims, damages, liabilities, contingencies, judgments, fines, penalties, charges, costs (including, without limitation, court costs, reasonable attorneys’ fees and costs of defense and investigation), amounts paid in settlement or expenses, joint or several, (collectively, “**Claims**”) incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an Indemnified Person is or may be a party thereto (“**Indemnified Damages**”), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other “blue sky” laws of any jurisdiction in which Registrable Securities are offered (“**Blue Sky Filing**”), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus if used prior to the effective date of such Registration Statement and not corrected prior to the effective date of such Registration Statement, or contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading or (iii) any violation or alleged violation by the Company of the 1933 Act, the 1934 Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to a Registration Statement or (iv) any violation of this Agreement (the matters in the foregoing clauses (i) through (iii) being, collectively, “**Violations**”); provided, however, that the Company shall not be liable in any such case to the extent that any such claim, loss, damage, liability, or expense arises out of or is based upon such Indemnified Person’s gross negligence, willful misconduct or fraud or any untrue statement or omission contained in such prospectus or other document based upon written information furnished to the Company by such Indemnified Person expressly for use in connection with such Registration Statement. Subject to Section 6(c), the Company shall reimburse the Indemnified Persons, promptly as such expenses are incurred and are due and payable, for reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim by an Indemnified Person arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished in writing to the Company by such Indemnified Person for such Indemnified Person expressly for use in connection with the preparation of such Registration Statement or any such amendment thereof or supplement thereto, if such prospectus was timely made available by the Company pursuant to Section 3(d); and (ii) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld or delayed. Such indemnity shall remain in full force and effect regardless of any investigation made by or on

(b) In connection with any Registration Statement in which an Investor is participating, such Investor agrees to severally and not jointly indemnify, hold harmless and defend, to the same extent and in the same manner as is set forth in Section 6(a), the Company, each of its directors, each of its officers who signs the Registration Statement and each Person, if any, who controls the Company within the meaning of the 1933 Act or the 1934 Act (each, an “**Indemnified Party**”), against any Claim or Indemnified Damages to which any of them may become subject, under the 1933 Act, the 1934 Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case, to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with written information furnished to the Company by such Investor expressly for use in connection with such Registration Statement; and, subject to Section 6(c) and the below provisos in this Section 6(b), such Investor will reimburse an Indemnified Party any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending any such Claim; provided, however, the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of such Investor, which consent shall not be unreasonably withheld or delayed. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Indemnified Party and shall survive the transfer of any of the Registrable Securities by any of the Investors pursuant to Section 9.

(c) Promptly after receipt by an Indemnified Person or Indemnified Party (as the case may be) under this Section 6 of notice of the commencement of any action or proceeding (including, without limitation, any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party (as the case may be) shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party (as the case may be); provided, however, an Indemnified Person or Indemnified Party (as the case may be) shall have the right to retain its own counsel with the fees and expenses of such counsel to be paid by the indemnifying party if: (i) the indemnifying party has agreed in writing to pay such fees and expenses; (ii) the indemnifying party shall have failed promptly to assume the defense of such Claim and to employ counsel reasonably satisfactory to such Indemnified Person or Indemnified Party (as the case may be) in any such Claim; or (iii) the named parties to any such Claim (including, without limitation, any impleaded parties) include both such Indemnified Person or Indemnified Party (as the case may be) and the indemnifying party, and such Indemnified Person or such Indemnified Party (as the case may be) shall have been advised by counsel that a conflict of interest is likely to exist if the same counsel were to represent such Indemnified Person or such Indemnified Party and the indemnifying party (in which case, if such Indemnified Person or such Indemnified Party (as the case may be) notifies the indemnifying party in writing that it elects to employ separate counsel at the expense of the indemnifying party, then the indemnifying party shall not have the right to assume the defense thereof and such counsel shall be at the expense of the indemnifying party, provided further that in the case of clause (iii) above the indemnifying party shall not be responsible for the reasonable fees and expenses of more than one (1) separate legal counsel for such Indemnified Person or Indemnified Party (as the case may be). The Indemnified Party or Indemnified Person (as the case may be) shall reasonably cooperate with the indemnifying party in connection with any negotiation or defense of any such action or Claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person (as the case may be) which relates to such action or Claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person (as the case may be) reasonably apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent; provided, however, the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the prior written consent of the Indemnified Party or Indemnified Person (as the case may be), consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person (as the case may be) of a release from all liability in respect to such Claim or litigation, and such settlement shall not include any admission as to fault on the part of the Indemnified Party. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person (as the case may be) with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party (as the case may be) under this Section 6, except to the extent that the indemnifying party is materially and adversely prejudiced in its ability to defend such action.

(d) The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

(e) The indemnity and contribution agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

7. Contribution.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations; provided, however: (i) no contribution shall be made under circumstances where the maker would not have been liable for indemnification under the fault standards set forth in Section 6 of this Agreement, (ii) no Person involved in the sale of Registrable Securities which Person is guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) in connection with such sale shall be entitled to contribution from any Person involved in such sale of Registrable Securities who was not guilty of fraudulent misrepresentation; and (iii) contribution by any seller of Registrable Securities shall be limited in amount to the amount of net proceeds received by such seller from the applicable sale of such Registrable Securities pursuant to such Registration Statement. Notwithstanding the provisions of this Section 7, no Investor shall be required to contribute, in the aggregate, any amount in excess of the amount by which the net proceeds actually received by such Investor from the applicable sale of the Registrable Securities subject to the Claim exceeds the amount of any damages that such Investor has otherwise been required to pay, or would otherwise be required to pay under Section 6(b), by reason of such untrue or alleged untrue statement or omission or alleged omission.

8. Reserved.

9. Assignment of Registration Rights.

All or any portion of the rights under this Agreement shall be automatically assignable by each Investor to any transferee or assignee (as the case may be) of all or any portion of such Investor's Registrable Securities, Preferred Shares or Warrants if: (i) such Investor agrees in writing with such transferee or assignee (as the case may be) to assign all or any portion of such rights, and a copy of such agreement is furnished to the Company within a reasonable time after such transfer or assignment (as the case may be); (ii) the Company is, within a reasonable time after such transfer or assignment (as the case may be), furnished with written notice of (a) the name and address of such transferee or assignee (as the case may be), and (b) the securities with respect to which such registration rights are being transferred or assigned (as the case may be); (iii) immediately following such transfer or assignment (as the case may be) the further disposition of such securities by such transferee or assignee (as the case may be) is restricted under the 1933 Act or applicable state securities laws if so required; (iv) at or before the time the Company receives the written notice contemplated by clause (ii) of this

sentence such transferee or assignee (as the case may be) agrees in writing with the Company to be bound by all of the provisions contained herein; (v) such transfer or assignment (as the case may be) shall have been made in accordance with the applicable requirements of the Securities Purchase Agreement, the Certificate of Designations and the Warrants (as the case may be); and (vi) such transfer or assignment (as the case may be) shall have been conducted in accordance with all applicable federal and state securities laws.

10. Amendment of Registration Rights.

Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and all of the Required Holders; provided that any such amendment or waiver that complies with the foregoing, but that disproportionately, materially and adversely affects the rights and obligations of any Investor relative to the comparable rights and obligations of the other Investors shall require the prior written consent of such adversely affected Investor. Any amendment or waiver effected in accordance with this Section 10 shall be binding upon each Investor and the Company, provided that no such amendment shall be effective to the extent that it (1) applies to less than all of the holders of Registrable Securities or (2) imposes any obligation or liability on any Investor without such Investor's prior written consent (which may be granted or withheld in such Investor's sole discretion). No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. 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 (other than the reimbursement of legal fees) also is offered to all of the parties to this Agreement.

11. Miscellaneous.

(a) Solely for purposes of this Agreement, a Person is deemed to be a holder of Registrable Securities whenever such Person owns, or is deemed to own, of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company shall act upon the basis of instructions, notice or election received from such record owner of such Registrable Securities.

(b) Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by electronic mail (provided that such sent email is kept on file (whether electronically or otherwise) by the sending party and the sending party does not receive an automatically generated message from the recipient's email server that such e-mail could not be delivered to such recipient); or (iii) one (1) Business Day after deposit with an overnight courier service with next day delivery specified, in each case, properly addressed to the party to receive the same. The mailing addresses and e-mail addresses for such communications shall be:

If to the Company:

MyMD Pharmaceuticals, Inc.
855 N. Wolfe Street, Suite 623
Baltimore, MD 21205
Attention: Christopher C. Chapman
Telephone: (856) 848-8698
Email: ccchapman@mymd.com

With a copy (for informational purposes only) to:

Haynes and Boone, LLP
30 Rockefeller Plaza, 26th Floor
New York, New York 10112
Telephone: (212) 659-7300
Attention: Rick Werner
Email: rick.werner@haynesboone.com

If to the Transfer Agent:

Securities Transfer Corporation 2901 N. Dallas Parkway Suite 380
Plano, Texas 75093

If to Legal Counsel:

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
919 3rd Avenue
New York, NY 10019
Telephone: (212) 935-3000
Attention: Kenneth R. Koch, Esq. or Daniel A. Bagliebter, Esq.
E-mail: krkoch@mintz.com or dabagliebter@mintz.com

If to a Buyer, to its mailing address and/or email address set forth on the Schedule of Buyers attached to the Securities Purchase Agreement, with copies to such Buyer's representatives as set forth on the Schedule of Buyers, or to such other mailing address and/or email address and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change, provided that Legal Counsel shall only be provided notices sent to PharmaCyte Biotech, Inc. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's e-mail containing the time, date and recipient's e-mail or (C) provided by a courier or overnight courier service shall be rebuttable evidence of personal service, receipt by e-mail or receipt from a nationally recognized overnight delivery service in accordance with clause (i), (ii) or (iii) above, respectively.

(c) Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof. The Company and each Investor acknowledge and agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that each party hereto shall be entitled to an injunction or injunctions to prevent or cure breaches of the provisions of this Agreement by any other party hereto 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), this being in addition to any other remedy to which any party may be entitled by law or equity.

(d) All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts

sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

(e) If any provision of this Agreement is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Agreement so long as this Agreement as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

(f) This Agreement, the other Transaction Documents, the schedules and exhibits attached hereto and thereto and the instruments referenced herein and therein constitute the entire agreement among the parties hereto and thereto solely with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement, the other Transaction Documents, the schedules and exhibits attached hereto and thereto and the instruments referenced herein and therein supersede all prior agreements and understandings among the parties hereto solely with respect to the subject matter hereof and thereof; provided, however, nothing contained in this Agreement or any other Transaction Document shall (or shall be deemed to) (i) have any effect on any agreements any Investor has entered into with the Company or any of its Subsidiaries prior to the date hereof with respect to any prior investment made by such Investor in the Company, (ii) waive, alter, modify or amend in any respect any obligations of the Company or any of its Subsidiaries or any rights of or benefits to any Investor or any other Person in any agreement entered into prior to the date hereof between or among the Company and/or any of its Subsidiaries and any Investor and all such agreements shall continue in full force and effect or (iii) limit any obligations of the Company under any of the other Transaction Documents.

(g) Subject to compliance with Section 9 (if applicable), this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto. This Agreement is not for the benefit of, nor may any provision hereof be enforced by, any Person, other than the parties hereto, their respective permitted successors and assigns and the Persons referred to in Sections 6 and 7 hereof.

(h) The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof. Unless the context clearly indicates otherwise, each pronoun herein shall be deemed to include the masculine, feminine, neuter, singular and plural forms thereof. The terms "including," "includes," "include" and words of like import shall be construed broadly as if followed by the words "without limitation." The terms "herein," "hereunder," "hereof" and words of like import refer to this entire Agreement instead of just the provision in which they are found.

(i) This Agreement may be executed in two or more identical counterparts, each of which shall be deemed an original, but all of which 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. In the event that any signature is delivered by facsimile or electronic transmission (including DocuSign and similar) or by an email which contains a portable document format (.pdf) file of an executed signature page, such signature page 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 signature page were an original thereof.

(j) 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 any 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) 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. Notwithstanding anything to the contrary set forth in Section 10, terms used in this Agreement but defined in the other Transaction Documents shall have the meanings ascribed to such terms on the Closing Date in such other Transaction Documents unless otherwise consented to in writing by each Investor.

(l) All consents and other determinations required to be made by the Investors pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by the Required Holders, determined as if all of the outstanding Preferred Shares then held by the Investors have been converted for Registrable Securities without regard to any limitations on redemption, amortization and/or conversion of the Preferred Shares and the outstanding Warrants then held by Investors have been exercised for Registrable Securities without regard to any limitations on exercise of the Warrants.

(m) 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.

(n) The obligations of each Investor under this Agreement and the other Transaction Documents are several and not joint with the obligations of any other Investor, and no Investor shall be responsible in any way for the performance of the obligations of any other Investor under this Agreement or any other Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Investor pursuant hereto or thereto, shall be deemed to constitute the Investors as, and the Company acknowledges that the Investors do not so constitute, a partnership, an association, a joint venture or any other kind of group or entity, or create a presumption that the Investors are in any way acting in concert or as a group or entity with respect to such obligations or the transactions contemplated by the Transaction Documents or any matters, and the Company acknowledges that the Investors are not acting in concert or as a group, and the Company shall not assert any such claim, with respect to such obligations or the transactions contemplated by this Agreement or any of the other Transaction Documents. Each Investor shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of any other Transaction Documents, and it shall not be necessary for any other Investor 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 herein was solely in the control of the Company, not the action or decision of any Investor, and was done solely for the convenience of the Company and not because it was required or requested to do so by any Investor. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company and an Investor, solely, and not between the Company and the Investors collectively and not between and among Investors.

[signature page follows]

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Registration Rights Agreement to be duly executed as of the date first written above.

COMPANY:

MYMD PHARMACEUTICALS, INC.

By: _____
Name:
Title:

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Registration Rights Agreement to be duly executed as of the date first written above.

BUYERS:

By: _____
Name:
Title:

EXHIBIT A

SELLING STOCKHOLDERS

The shares of common stock being offered by the selling stockholders are those issuable to the selling stockholders upon conversion of the preferred shares and exercise of the warrants. For additional information regarding the issuance of the preferred shares and the warrants, see "Private Placement of Preferred Shares and Warrants" above. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time. Except for the ownership of the preferred shares and the warrants issued pursuant to the Securities Purchase Agreement, the selling stockholders have not had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder) of the shares of common stock held by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by the selling stockholders, based on their respective ownership of shares of common stock, preferred shares and warrants, as of _____, 20__, assuming conversion of the preferred shares and exercise of the warrants held by each such selling stockholder on that date but taking account of any limitations on conversion and exercise set forth therein.

The third column lists the shares of common stock being offered by this prospectus by the selling stockholders and does not take in account any limitations on (i) conversion of the preferred shares set forth therein or (ii) exercise of the warrants set forth therein.

In accordance with the terms of a registration rights agreement with the holders of the preferred shares and the warrants, this prospectus generally covers the resale of the sum of (i) the maximum number of shares of common stock issued or issuable pursuant to the Certificate of Designations, including payment of interest on the preferred shares through [DATE], and (ii) the maximum number of shares of common stock issued or issuable upon exercise of the warrants, in each case, determined as if the outstanding preferred shares (including interest on the preferred shares through [DATE]) and warrants were converted or exercised (as the case may be) in full (without regard to any limitations on conversion or exercise contained therein solely for the purpose of such calculation) at the floor price or exercise price (as the case may be) calculated as of the trading day immediately preceding the date this registration statement was initially filed with the SEC. Because the conversion price of the preferred shares and the exercise price of the warrants may be adjusted, the number of shares that will actually be issued may be more or less than the number of shares being offered by this prospectus. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

Under the terms of the Certificate of Designations and the warrants, certain of our selling stockholders may not convert the preferred shares or exercise the warrants to the extent (but only to the extent) such selling stockholder or any of its affiliates would beneficially own a number of shares of our shares of common stock which would exceed 19.99% of the outstanding shares of the Company. The number of shares in the second column reflects these limitations. The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

<u>Name of Selling Stockholder</u>	<u>Number of shares of Common Stock Owned Prior to Offering</u>	<u>Maximum Number of shares of Common Stock to be Sold Pursuant to this Prospectus</u>	<u>Number of shares of Common Stock of Owned After Offering</u>
[LEAD INVESTOR] (1) [OTHER BUYERS]			

(1) []

EXHIBIT B

PLAN OF DISTRIBUTION

We are registering the shares of common stock issuable upon conversion of the preferred shares and exercise of the warrants to permit the resale of these shares of common stock by the holders of the preferred shares and warrants from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of common stock, although we will receive the exercise price of any warrants not exercised by the selling stockholders on a cashless exercise basis. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling stockholders may sell all or a portion of the shares of common stock held by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;

- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales made after the date the Registration Statement is declared effective by the SEC;
- broker-dealers may agree with a selling security holder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares of common stock under Rule 144 promulgated under the Securities Act of 1933, as amended, if available, rather than under this prospectus. In addition, the selling stockholders may transfer the shares of common stock by other means not described in this prospectus. If the selling stockholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling stockholders may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares.

The selling stockholders may pledge or grant a security interest in some or all of the preferred shares, warrants or shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the selling stockholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the common stock. All of the foregoing may affect the marketability of the common stock and the ability of any person or entity to engage in market-making activities with respect to the common stock.

We will pay all expenses of the registration of the shares of common stock pursuant to the registration rights agreement, estimated to be \$[] in total, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act in accordance with the registration rights agreements or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related registration rights agreements or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

REGISTRATION RIGHTS AGREEMENT

This **REGISTRATION RIGHTS AGREEMENT** (this “**Agreement**”), dated as of May 20, 2024, is by and among MyMD Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), and the undersigned buyers (each, a “**Buyer**,” and collectively, the “**Buyers**”).

RECITALS

A. In connection with the Securities Purchase Agreement by and among the parties hereto, dated as of May 20, 2024 (the “**Securities Purchase Agreement**”), the Company has agreed, upon the terms and subject to the conditions of the Securities Purchase Agreement, to issue and sell to each Buyer (i) the Preferred Shares (as defined in the Securities Purchase Agreement), which will be convertible into Conversion Shares (as defined in the Securities Purchase Agreement) in accordance with the terms of the Certificate of Designations (as defined in the Securities Purchase Agreement) and (ii) the Warrants (as defined in the Securities Purchase Agreement), which will be exercisable to purchase Warrant Shares (as defined in the Securities Purchase Agreement) in accordance with the terms of the Warrants.

B. To induce the Buyers to consummate the transactions contemplated by the Securities Purchase Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the “**1933 Act**”), and applicable state securities laws.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and each of the Buyers hereby agree as follows:

1. Definitions.

Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Securities Purchase Agreement. As used in this Agreement, the following terms shall have the following meanings:

(a) “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

(b) “**Closing Date**” shall have the meaning set forth in the Securities Purchase Agreement.

(c) “**Effective Date**” means the date that the applicable Registration Statement has been declared effective by the SEC.

(d) “**Effectiveness Deadline**” means (i) with respect to the initial Registration Statement required to be filed pursuant to Section 2(a), the earlier of the (A) 90th calendar day after the Closing Date (or, in the event of a “full review” by the SEC, the 120th calendar day after the Closing Date) and (B) 2nd Business Day after the date the Company is notified (orally or in writing, whichever is earlier) by the SEC that such Registration Statement will not be reviewed or will not be subject to further review and (ii) with respect to any additional Registration Statements which may be required hereunder, the earlier of the (A) 30th calendar day following the date on which an additional Registration Statement is required to be filed hereunder (or, in the event of a “full review” by the SEC, the 60th calendar day following the date such additional Registration Statement is required to be filed hereunder) and (B) 2nd Business Day after the date the Company is notified (orally or in writing, whichever is earlier) by the SEC that such Registration Statement will not be reviewed or will not be subject to further review, 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.

(e) “**Filing Deadline**” means (i) with respect to the initial Registration Statement required to be filed pursuant to Section 2(a), the 30th calendar day after the Closing Date and (ii) with respect to any additional Registration Statements that may be required to be filed by the Company pursuant to this Agreement, the date on which the Company was required to file such additional Registration Statement pursuant to the terms of this Agreement.

(f) “**Investor**” means a Buyer or any transferee or assignee of any Registrable Securities, Preferred Shares or Warrants, as applicable, to whom a Buyer assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9 and any transferee or assignee thereof to whom a transferee or assignee of any Registrable Securities, Preferred Shares or Warrants, as applicable, assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9.

(g) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization or a government or any department or agency thereof.

(h) “**register**,” “**registered**,” and “**registration**” refer to a registration effected by preparing and filing one or more Registration Statements in compliance with the 1933 Act and pursuant to Rule 415 and the declaration of effectiveness of such Registration Statement(s) by the SEC.

(i) “**Registrable Securities**” means (i) the Conversion Shares, (ii) the Warrant Shares, and (iii) any capital stock of the Company issued or issuable with respect to the Conversion Shares, the Warrant Shares, the Preferred Shares or the Warrants, including, without limitation, (1) as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise and (2) any capital stock of the Company into which the shares of Common Stock (as defined in the Certificate of Designations) are converted or exchanged and capital stock of a Successor Entity (as defined in the Warrants) into which the shares of Common Stock are converted or exchanged, in each case, without regard to any limitations on conversion of the Preferred Shares or exercise of the Warrants; provided, however, that any such Registrable 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 (a) a Registration Statement with respect to the sale of such Registrable Securities is declared effective by the SEC under the 1933 Act and such Registrable Securities have been disposed of by the Investor in accordance with such effective Registration Statement, (b) such Registrable Securities have been previously sold in accordance with Rule 144, or (c) 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 Company’s transfer agent and the affected Investors (assuming that such securities and any securities issuable upon exercise, conversion or exchange 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).

(j) “**Registration Statement**” means a registration statement or registration statements of the Company filed under the 1933 Act covering Registrable Securities.

(k) “**Required Holders**” shall have the meaning as set forth in the Securities Purchase Agreement.

(l) “**Required Registration Amount**” means, as of any time of determination, the sum of (i) 200% of the maximum number of Conversion Shares issuable upon conversion of the Preferred Shares ((x) assuming for purposes hereof that the Preferred Shares are convertible at the initial Conversion Price (as defined in the Certificate of Designations) and (y) any such conversion shall not take into account any limitations on the conversion of the Preferred Shares set forth in the Certificate of Designations) and (ii) 200% of the maximum number of Warrant Shares issuable upon exercise of the Warrants (without taking into account any limitations on the exercise of the Warrants set forth therein), all subject to adjustment as provided in Section 2(d) and/or Section 2(f).

(m) “**Rule 144**” means Rule 144 promulgated by the SEC 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 SEC that may at any time permit the Investors to sell securities of the Company to the public without registration.

(n) “**Rule 415**” means Rule 415 promulgated by the SEC 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 SEC providing for offering securities on a continuous or delayed basis.

(o) “**SEC**” means the United States Securities and Exchange Commission or any successor thereto.

2. Registration.

(a) Mandatory Registration. The Company shall prepare and, as soon as practicable, but in no event later than the Filing Deadline, file with the SEC an initial Registration Statement on Form S-3 covering the resale of all of the Registrable Securities, provided that such initial Registration Statement shall register for resale at least the number of shares of Common Stock equal to the Required Registration Amount as of the date such Registration Statement is initially filed with the SEC; provided further that if Form S-3 is unavailable for such a registration, the Company shall use such other form as is required by Section 2(c). Such initial Registration Statement, and each other Registration Statement required to be filed pursuant to the terms of this Agreement, shall contain (except if otherwise directed by the Required Holders) the “Selling Stockholders” and “Plan of Distribution” sections in substantially the form attached hereto as **Exhibit A** and **Exhibit B**, respectively. The Company shall use its reasonable best efforts to have such initial Registration Statement, and each other Registration Statement required to be filed pursuant to the terms of this Agreement, declared effective by the SEC as soon as practicable, but in no event later than the applicable Effectiveness Deadline for such Registration Statement.

(b) Legal Counsel. Subject to Section 5 hereof, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel solely to the lead investor (“**Legal Counsel**”), shall be provided a copy of any registration, solely on behalf of the lead investor, pursuant to this Section 2.

(c) Ineligibility to Use Form S-3. In the event that Form S-3 is not available for the registration of the resale of Registrable Securities hereunder, the Company shall (i) register the resale of the Registrable Securities on Form S-1 or another appropriate form reasonably acceptable to the Required Holders and (ii) undertake to register the resale of the Registrable Securities on Form S-3 as soon as such form is available, provided that the Company shall maintain the effectiveness of all Registration Statements then in effect until such time as a Registration Statement on Form S-3 covering the resale of all the Registrable Securities has been declared effective by the SEC and the prospectus contained therein is available for use.

(d) Sufficient Number of Shares Registered. In the event the number of shares available under any Registration Statement is insufficient to cover all of the Registrable Securities required to be covered by such Registration Statement or an Investor’s allocated portion of the Registrable Securities pursuant to Section 2(h), the Company shall amend such Registration Statement (if permissible), or file with the SEC a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover at least the Required Registration Amount less any securities that are no longer Registrable Securities as of the Trading Day immediately preceding the date of the filing of such amendment or new Registration Statement, in each case, as soon as practicable. The Company shall use its reasonable best efforts to cause such amendment to such Registration Statement and/or such new Registration Statement (as the case may be) to become effective as soon as practicable following the filing thereof with the SEC, but in no event later than the applicable Effectiveness Deadline for such Registration Statement. For purposes of the foregoing provision, the number of shares available under a Registration Statement shall be deemed “insufficient to cover all of the Registrable Securities” if at any time the number of shares of Common Stock available for resale under the applicable Registration Statement is less than the Required Registration Amount as of such time. The calculation set forth in the foregoing sentence shall be made without regard to any limitations on conversion, amortization and/or redemption of the Preferred Shares or exercise of the Warrants (and such calculation shall assume (A) that the Preferred Shares are then convertible in full into shares of Common Stock at the initial Conversion Price (as defined in the Certificate of Designations), and (B) the Warrants are then exercisable in full into shares of Common Stock at the then prevailing Exercise Price (as defined in the Warrants)).

(e) (c) Effect of Failure to File and Obtain and Maintain Effectiveness of any Registration Statement. If (i) a Registration Statement covering the resale of all of the Registrable Securities required to be covered thereby (disregarding any reduction pursuant to Section 2(f)) and required to be filed by the Company pursuant to this Agreement is (A) not filed with the SEC on or before the Filing Deadline for such Registration Statement (a “**Filing Failure**”) (it being understood that if the Company files a Registration Statement without affording each Investor the opportunity to review and comment on the same as required by Section 3(c) hereof, the Company shall be deemed to not have satisfied this clause (i)(A) and such event shall be deemed to be a Filing Failure) or (B) not declared effective by the SEC on or before the Effectiveness Deadline for such Registration Statement (an “**Effectiveness Failure**”) (it being understood that if on the Business Day immediately following the Effective Date for such Registration Statement the Company shall not have filed a “final” prospectus for such Registration Statement with the SEC under Rule 424(b) in accordance with Section 3(b) (whether or not such a prospectus is technically required by such rule), the Company shall be deemed to not have satisfied this clause (i)(B) and such event shall be deemed to be an Effectiveness Failure), (ii) other than during an Allowable Grace Period (as defined below), on any day after the Effective Date of a Registration Statement sales of all of the Registrable Securities required to be included on such Registration Statement (disregarding any reduction pursuant to Section 2(f)) cannot be made pursuant to such Registration Statement (including, without limitation, because of a failure to keep such Registration Statement effective, a failure to disclose such information as is necessary for sales to be made pursuant to such Registration Statement, a suspension or delisting of (or a failure to timely list) the Common Stock on the Principal Market (as defined in the Securities Purchase Agreement) or any other limitations imposed by the Principal Market, or a failure to register a sufficient number of shares of Common Stock or by reason of a stop order) or the prospectus contained therein is not available for use for any reason (a “**Maintenance Failure**”), or (iii) if a Registration Statement is not effective for any reason or the prospectus contained therein is not available for use for any reason, and either (x) the Company fails for any reason to satisfy the requirements of Rule 144(c)(1), including, without limitation, the failure to satisfy the current public information requirement under Rule 144(c) or (y) the Company has ever been an issuer described in Rule 144(i)(1)(i) or becomes such an issuer in the future, and the Company shall fail to satisfy any condition set forth in Rule 144(i)(2) (a “**Current Public Information Failure**”) as a result of which any of the Investors are unable to sell Registrable Securities without restriction under Rule 144 (including, without limitation, volume restrictions), then, as partial relief for the damages to any holder by reason of any such delay in, or reduction of, its ability to sell the underlying shares of Common Stock (which remedy shall not be exclusive of any other remedies available at law or in equity, including, without limitation, specific performance), the Company shall pay to each holder of Registrable Securities relating to such Registration Statement an amount in cash equal to two percent (2%) of such Investor’s respective Purchase Price (as defined in the Securities Purchase Agreement) on the Closing Date (1) on the date of such Filing Failure, Effectiveness Failure, Maintenance Failure or Current Public Information Failure, as applicable, and (2) on every thirty (30) day anniversary of (I) a Filing Failure until such Filing Failure is cured; (II) an Effectiveness Failure until such Effectiveness Failure is cured; (III) a Maintenance Failure until such Maintenance Failure is cured; and (IV) a Current Public Information Failure until the earlier of (i) the date such Current Public Information Failure is cured and (ii) such time that such public information is no longer required pursuant to Rule 144 (in each case, prorated for periods totaling less than thirty (30) days). The payments to which a holder of Registrable Securities shall be entitled pursuant to this Section 2(e) are referred to herein as “**Registration Delay Payments.**” Following the initial Registration Delay Payment for any particular event or failure (which shall be paid on the date of such event or failure, as set forth above), without limiting the foregoing, if an event or failure giving rise to the Registration Delay Payments is cured prior to any thirty (30) day anniversary of such event or failure, then such Registration Delay Payment shall be made on the third (3rd) Business Day after such cure. In the event the Company fails to make Registration Delay Payments in a timely manner in accordance with the foregoing, such Registration Delay Payments shall bear interest at the rate of one and one half percent (1.5%) per month (prorated for partial months) until paid in full. Notwithstanding the

foregoing, no Registration Delay Payments shall be owed to an Investor (other than with respect to a Maintenance Failure resulting from a suspension or delisting of (or a failure to timely list) the Common Stock on the Principal Market) with respect to any period during which all of such Investor's Registrable Securities may be sold by such Investor without restriction under Rule 144 (including, without limitation, volume restrictions) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable).

(f) Offering. Notwithstanding anything to the contrary contained in this Agreement, but subject to the payment of the Registration Delay Payments pursuant to Section 2(c), in the event the staff of the SEC (the "Staff") or the SEC seeks to characterize any offering pursuant to a Registration Statement filed pursuant to this Agreement as constituting an offering of securities by, or on behalf of, the Company, or in any other manner, such that the Staff or the SEC does not permit such Registration Statement to become effective and used for resales in a manner that does not constitute such an offering and that permits the continuous resale at the market by the Investors participating therein (or as otherwise may be acceptable to each Investor) without being named therein as an "underwriter," then the Company shall reduce the number of shares to be included in such Registration Statement by all Investors until such time as the Staff and the SEC shall so permit such Registration Statement to become effective as aforesaid. In making such reduction, the Company shall reduce the number of shares to be included by all Investors on a pro rata basis (based upon the number of Registrable Securities otherwise required to be included for each Investor) unless the inclusion of shares by a particular Investor or a particular set of Investors are resulting in the Staff or the SEC's "by or on behalf of the Company" offering position, in which event the shares held by such Investor or set of Investors shall be the only shares subject to reduction (and if by a set of Investors on a pro rata basis by such Investors or on such other basis as would result in the exclusion of the least number of shares by all such Investors); provided, that, with respect to such pro rata portion allocated to any Investor, such Investor may elect the allocation of such pro rata portion among the Registrable Securities of such Investor. In addition, in the event that the Staff or the SEC requires any Investor seeking to sell securities under a Registration Statement filed pursuant to this Agreement to be specifically identified as an "underwriter" in order to permit such Registration Statement to become effective, and such Investor does not consent to being so named as an underwriter in such Registration Statement, then, in each such case, the Company shall reduce the total number of Registrable Securities to be registered on behalf of such Investor, until such time as the Staff or the SEC does not require such identification or until such Investor accepts such identification and the manner thereof. Any reduction pursuant to this paragraph will first reduce all Registrable Securities other than those issued pursuant to the Securities Purchase Agreement. In the event of any reduction in Registrable Securities pursuant to this paragraph, an affected Investor shall have the right to require, upon delivery of a written request to the Company signed by such Investor, the Company to file a registration statement within twenty (20) days of such request (subject to any restrictions imposed by Rule 415 or required by the Staff or the SEC) for resale by such Investor in a manner acceptable to such Investor, and the Company shall following such request cause to be and keep effective such registration statement in the same manner as otherwise contemplated in this Agreement for registration statements hereunder, in each case until such time as: (i) all Registrable Securities held by such Investor have been registered and sold pursuant to an effective Registration Statement in a manner acceptable to such Investor or (ii) all Registrable Securities may be resold by such Investor without restriction (including, without limitation, volume limitations) pursuant to Rule 144 (taking account of any Staff position with respect to "affiliate" status) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable) or (iii) such Investor agrees to be named as an underwriter in any such Registration Statement in a manner acceptable to such Investor as to all Registrable Securities held by such Investor and that have not theretofore been included in a Registration Statement under this Agreement (it being understood that the special demand right under this sentence may be exercised by an Investor multiple times and with respect to limited amounts of Registrable Securities in order to permit the resale thereof by such Investor as contemplated above).

(g) Piggyback Registrations. Without limiting any obligation of the Company hereunder or under the Securities Purchase Agreement, if there is not an effective Registration Statement covering all of the Registrable Securities or the prospectus contained therein is not available for use and the Company shall determine to prepare and file with the SEC a registration statement or offering statement relating to an offering for its own account or the account of others under the 1933 Act of any of its equity securities (other than on Form S-4 or Form S-8 (each as promulgated under the 1933 Act) or their then equivalents relating to equity securities to be issued solely in connection with any acquisition of any entity or business or equity securities issuable in connection with the Company's share option or other employee benefit plans), then the Company shall deliver to each Investor a written notice of such determination and, if within ten (10) days after the date of the delivery of such notice, any such Investor shall so request in writing, the Company shall include in such registration statement or offering statement all or any part of such Registrable Securities such Investor requests to be registered; provided, however, the Company shall not be required to register any Registrable Securities pursuant to this Section 2(g) that are eligible for resale pursuant to Rule 144 without restriction (including, without limitation, volume restrictions) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable) or that are the subject of a then-effective Registration Statement.

(h) Allocation of Registrable Securities. The initial number of Registrable Securities included in any Registration Statement and any increase in the number of Registrable Securities included therein shall be allocated pro rata among the Investors based on the number of Registrable Securities held by each Investor at the time such Registration Statement covering such initial number of Registrable Securities or increase thereof is declared effective by the SEC. In the event that an Investor sells or otherwise transfers any of such Investor's Registrable Securities, each transferee or assignee (as the case may be) that becomes an Investor shall be allocated a pro rata portion of the then-remaining number of Registrable Securities included in such Registration Statement for such transferor or assignee (as the case may be). Any shares of Common Stock included in a Registration Statement and which remain allocated to any Person which ceases to hold any Registrable Securities covered by such Registration Statement shall be allocated to the remaining Investors, pro rata based on the number of Registrable Securities then held by such Investors which are covered by such Registration Statement.

(i) No Inclusion of Other Securities. The Company shall in no event include any securities other than Registrable Securities on any Registration Statement filed in accordance herewith without the prior written consent of the Required Holders. Until the Applicable Date (as defined in the Securities Purchase Agreement), the Company shall not enter into any agreement providing any registration rights to any of its security holders, except as otherwise permitted under the Securities Purchase Agreement.

3. Related Obligations.

The Company shall use its reasonable best efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof, and, pursuant thereto, the Company shall have the following obligations:

(a) The Company shall promptly prepare and file with the SEC a Registration Statement with respect to all the Registrable Securities (but in no event later than the applicable Filing Deadline) and use its reasonable best efforts to cause such Registration Statement to become effective as soon as practicable after such filing (but in no event later than the Effectiveness Deadline). Subject to Allowable Grace Periods, the Company shall keep each Registration Statement effective (and the prospectus contained therein available for use) pursuant to Rule 415 for resales by the Investors on a delayed or continuous basis at then-prevailing market prices (and not fixed prices) at all times until the earlier of (i) the date as of which all of the Investors may sell all of the Registrable Securities required to be covered by such Registration Statement (disregarding any reduction pursuant to Section 2(f)) without restriction pursuant to Rule 144 (including, without limitation, volume restrictions) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable), (ii) the date on which the Investors shall have sold all of the Registrable Securities covered by such Registration Statement or (iii) the five (5) year anniversary of the Closing Date (the "Registration Period"). Notwithstanding anything to the contrary contained in this Agreement, the Company shall ensure that, when filed and at all times while effective, each Registration Statement (including, without limitation, all amendments and supplements thereto) and the prospectus (including, without limitation, all amendments and supplements thereto) used in connection with such Registration Statement shall not contain any 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 the case of prospectuses, in the light of the circumstances in which they were made) not misleading. The Company shall submit to the SEC, within two (2) Business Days after the date that the Company learns that no review of a particular Registration Statement will be made by the Staff or that the Staff has no further comments on a particular Registration Statement (as the case may be), a request for acceleration of effectiveness of such Registration Statement to a time and date not later than two (2) Business Days after the submission of such request (but taking

account of any Staff position with respect to the date on which the Staff will permit such request for acceleration to be filed with the SEC). The Company shall respond in writing to comments made by the SEC in respect of a Registration Statement as soon as practicable that an amendment is required in order for a Registration Statement to be declared effective.

(b) Subject to Section 3(r) of this Agreement, the Company shall prepare and file with the SEC such amendments (including, without limitation, post-effective amendments) and supplements to each Registration Statement and the prospectus used in connection with each such Registration Statement, which prospectus is to be filed pursuant to Rule 424 promulgated under the 1933 Act, as may be necessary to keep each such Registration Statement effective at all times during the Registration Period for such Registration Statement, and, during such period, comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Securities of the Company required to be covered by such Registration Statement until the end of the Registration Period; provided, however, by the second Business Day immediately following each Effective Date, the Company shall file with the SEC in accordance with Rule 424(b) under the 1933 Act the final prospectus to be used in connection with sales pursuant to the applicable Registration Statement (whether or not such a prospectus is technically required by such rule). In the case of amendments and supplements to any Registration Statement which are required to be filed pursuant to this Agreement (including, without limitation, pursuant to this Section 3(b)) by reason of the Company filing a Current Report on Form 8-K, an Annual Report on Form 10-K, a Quarterly Report on Form 10-Q or any analogous report under the Securities Exchange Act of 1934, as amended (the "1934 Act"), the Company shall, if permitted under the applicable rules and regulations of the SEC, have incorporated such report by reference into such Registration Statement, if applicable, or shall file such amendments or supplements with the SEC on the same day on which the 1934 Act report is filed which created the requirement for the Company to amend or supplement such Registration Statement.

(c) The Company shall (A) permit each Investor to review and comment upon (i) each Registration Statement at least three (3) days prior to its filing with the SEC and (ii) all amendments and supplements to each Registration Statement (including, without limitation, the prospectus contained therein) (except for Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and any similar or successor reports) within a reasonable number of days prior to their filing with the SEC, and (B) not file any Registration Statement or amendment or supplement thereto in a form to which such Investor reasonably objects; provided, that the Company shall not have any obligation to modify any information if the Company reasonably expects that so doing would cause (i) the Registration Statement to contain an 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 not misleading or (ii) any prospectus contained therein to contain an untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading. The Company shall promptly furnish to each Investor, without charge, (i) copies of any correspondence from the SEC or the Staff to the Company or its representatives relating to each Registration Statement, provided that such correspondence shall not contain any material, non-public information regarding the Company or any of its Subsidiaries (as defined in the Securities Purchase Agreement), (ii) after the same is prepared and filed with the SEC, one (1) copy of each Registration Statement and any amendment(s) and supplement(s) thereto, including, without limitation, financial statements and schedules, all documents incorporated therein by reference, if requested by an Investor, and all exhibits and (iii) upon the effectiveness of each Registration Statement, one (1) copy of the prospectus included in such Registration Statement and all amendments and supplements thereto, provided, that any such item which is available on the EDGAR system (or successor thereto) need not be furnished. The Company shall reasonably cooperate with each Investor in performing the Company's obligations pursuant to this Section 3.

(d) The Company shall promptly furnish to each Investor whose Registrable Securities are included in any Registration Statement, without charge, (i) after the same is prepared and filed with the SEC, at least one (1) copy of each Registration Statement and any amendment(s) and supplement(s) thereto, including, without limitation, financial statements and schedules, all documents incorporated therein by reference, if requested by an Investor, all exhibits and each preliminary prospectus, provided, that any such item which is available on the EDGAR system (or successor thereto) need not be furnished.

(e) The Company shall use its reasonable best efforts to (i) register and qualify, unless an exemption from registration and qualification applies, the resale by Investors of the Registrable Securities covered by a Registration Statement under such other securities or "blue sky" laws of all applicable jurisdictions in the United States, (ii) prepare and file in those jurisdictions, such amendments (including, without limitation, post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions; provided, however, the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(e), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify Legal Counsel, legal counsel for each other Investor and each Investor who holds Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or "blue sky" laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

(f) The Company shall notify each Investor in writing of the happening of any event, as promptly as practicable after becoming aware of such event, as a result of which the prospectus included in a Registration Statement, as then in effect, may include an untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (provided that in no event shall such notice contain any material, non-public information regarding the Company or any of its Subsidiaries), and, subject to Section 3(r), promptly prepare a supplement or amendment to such Registration Statement and such prospectus contained therein to correct such untrue statement or omission and deliver one (1) copy of such supplement or amendment to each Investor, provided, that any such item which is available on the EDGAR system (or successor thereto) need not be furnished. The Company shall also promptly notify each Investor in writing (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to each Investor by e-mail on the same day of such effectiveness and by overnight mail), and when the Company receives written notice from the SEC that a Registration Statement or any post-effective amendment will be reviewed by the SEC, (ii) of any request by the SEC for amendments or supplements to a Registration Statement or related prospectus or related information, (iii) of the Company's reasonable determination that a post-effective amendment to a Registration Statement would be appropriate; and (iv) of the receipt of any request by the SEC or any other federal or state governmental authority for any additional information relating to the Registration Statement or any amendment or supplement thereto or any related prospectus. The Company shall respond as promptly as practicable to any comments received from the SEC with respect to each Registration Statement or any amendment thereto.

(g) The Company shall (i) use its reasonable best efforts to prevent the issuance of any stop order or other suspension of effectiveness of each Registration Statement or the use of any prospectus contained therein, or the suspension of the qualification, or the loss of an exemption from qualification, of any of the Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and (ii) notify each Investor who holds Registrable Securities of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

(h) [Reserved]

(i) [Reserved]

(j) The Company shall hold in confidence and not make any disclosure of information concerning an Investor provided to the Company unless (i) disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement or is otherwise required to be disclosed in such Registration Statement pursuant to the 1933 Act, (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other Transaction Document. The Company agrees that it shall, upon learning that

disclosure of such information concerning an Investor is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to such Investor and allow such Investor, at such Investor's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

(k) Without limiting any obligation of the Company under the Securities Purchase Agreement, the Company shall use its reasonable best efforts either to (i) cause all of the Registrable Securities covered by each Registration Statement to be listed on each securities exchange on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange, or (ii) secure designation and quotation of all of the Registrable Securities covered by each Registration Statement on an Eligible Market (as defined in the Securities Purchase Agreement). In addition, the Company shall cooperate with each Investor and any broker or dealer through which any such Investor proposes to sell its Registrable Securities in effecting a filing with the Financial Industry Regulatory Authority ("FINRA") pursuant to FINRA Rule 5110 as requested by such Investor. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 3(k).

(l) The Company shall cooperate with the Investors who hold Registrable Securities being offered and, to the extent applicable, facilitate the timely preparation and delivery of certificates (not bearing any restrictive legend) representing the Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such denominations or amounts (as the case may be) as the Investors may reasonably request from time to time and registered in such names as the Investors may request.

(m) If requested by an Investor, the Company shall as soon as practicable after receipt of notice from such Investor and subject to Section 3(r) hereof, (i) incorporate in a prospectus supplement or post-effective amendment such information as an Investor reasonably requests to be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering; (ii) make all required filings of such prospectus supplement or post-effective amendment after being notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) supplement or make amendments to any Registration Statement or prospectus contained therein if reasonably requested by an Investor holding any Registrable Securities.

(n) The Company shall use its best efforts to cause the Registrable Securities covered by a Registration Statement to be registered with or approved by such other United States governmental agencies or authorities as may be necessary to consummate the disposition of such Registrable Securities.

(o) The Company shall make generally available to its security holders as soon as practical, but not later than ninety (90) days after the close of the period covered thereby, an earnings statement (in form complying with, and in the manner provided by, the provisions of Rule 158 under the 1933 Act) covering a twelve-month period beginning not later than the first day of the Company's fiscal quarter next following the applicable Effective Date of each Registration Statement.

(p) The Company shall otherwise use its best efforts to comply with all applicable rules and regulations of the SEC in connection with any registration hereunder.

(q) Within three (3) Business Days after a Registration Statement which covers Registrable Securities is declared effective by the SEC, the Company shall deliver, and shall cause legal counsel for the Company to deliver, to the transfer agent for such Registrable Securities (with copies to the Investors whose Registrable Securities are included in such Registration Statement) confirmation that such Registration Statement has been declared effective by the SEC in the form acceptable to the Transfer Agent.

(r) Notwithstanding anything to the contrary herein (but subject to the last sentence of this Section 3(r)), at any time after the Effective Date of a particular Registration Statement, the Company may delay the disclosure of material, non-public information concerning the Company or any of its Subsidiaries the disclosure of which at the time is not, in the good faith opinion of the board of directors of the Company, in the best interest of the Company and, in the opinion of counsel to the Company, otherwise required (a "Grace Period"), provided that the Company shall promptly notify the Investors in writing of the (i) existence of material, non-public information giving rise to a Grace Period (provided that in each such notice the Company shall not disclose the content of such material, non-public information to any of the Investors) and the date on which such Grace Period will begin and (ii) date on which such Grace Period ends, provided further that (I) no Grace Period shall exceed fifteen (15) consecutive days and during any three hundred sixty five (365) day period all such Grace Periods shall not exceed an aggregate of thirty (30) days and (II) the first day of any Grace Period must be at least five (5) Trading Days after the last day of any prior Grace Period and (III) no Grace Period may exist during the sixty (60) Trading Day period immediately following the Effective Date of such Registration Statement (provided that such sixty (60) Trading Day period shall be extended by the number of Trading Days during such period and any extension thereof contemplated by this proviso during which such Registration Statement is not effective or the prospectus contained therein is not available for use) (each, an "Allowable Grace Period"). For purposes of determining the length of a Grace Period above, such Grace Period shall begin on and include the date the Investors receive the notice referred to in clause (i) above and shall end on and include the later of the date the Investors receive the notice referred to in clause (ii) above and the date referred to in such notice. The provisions of Section 3(g) hereof shall not be applicable during the period of any Allowable Grace Period. Upon expiration of each Grace Period, the Company shall again be bound by the first sentence of Section 3(f) with respect to the information giving rise thereto unless such material, non-public information is no longer applicable. Notwithstanding anything to the contrary contained in this Section 3(r), the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of an Investor in accordance with the terms of the Securities Purchase Agreement in connection with any sale of Registrable Securities with respect to which such Investor has entered into a contract for sale, and delivered a copy of the prospectus included as part of the particular Registration Statement to the extent applicable, prior to such Investor's receipt of the notice of a Grace Period and for which the Investor has not yet settled.

(s) The Company shall take all other reasonable actions necessary to expedite and facilitate disposition by each Investors of its Registrable Securities pursuant to each Registration Statement.

(t) Neither the Company nor any Subsidiary or affiliate thereof shall identify any Investor as an underwriter in any public disclosure or filing with the SEC, the Principal Market or any Eligible Market and any Buyer being deemed an underwriter by the SEC shall not relieve the Company of any obligations it has under this Agreement or any other Transaction Document (as defined in the Securities Purchase Agreement); provided, however, that the foregoing shall not prohibit the Company from including the disclosure found in the "Plan of Distribution" section attached hereto as Exhibit A in the Registration Statement.

(u) Neither the Company nor any of its Subsidiaries has entered, as of the date hereof, nor shall the Company or any of its Subsidiaries, on or after the date of this Agreement, enter into any agreement with respect to its securities, that would have the effect of impairing the rights granted to the Buyers in this Agreement or otherwise conflicts with the provisions hereof.

4. Obligations of the Investors.

(a) At least three (3) Business Days prior to the first anticipated filing date of each Registration Statement, the Company shall notify each Investor in writing of the information the Company requires from each such Investor with respect to such Registration Statement. It shall be a condition precedent to the obligations of the Company to complete the registration pursuant to this Agreement with respect to the Registrable Securities of a particular Investor that such Investor shall furnish to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it, as shall be reasonably required to effect and maintain the effectiveness of the registration of such Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request within 2 Business Days of such notice.

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

(c) Each Investor agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(g) or the first sentence of Section 3(f), such Investor will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until such Investor's receipt of the copies of the supplemented or amended prospectus contemplated by Section 3(g) or the first sentence of Section 3(f) or receipt of notice that no supplement or amendment is required. Notwithstanding anything to the contrary in this Section 4(c) and subject to applicable law, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of an Investor in accordance with the terms of the Securities Purchase Agreement in connection with any sale of Registrable Securities with respect to which such Investor has entered into a contract for sale prior to the Investor's receipt of a notice from the Company of the happening of any event of the kind described in Section 3(g) or the first sentence of Section 3(f) and for which such Investor has not yet settled.

5. Expenses of Registration.

All reasonable expenses, other than underwriting discounts and commissions, incurred in connection with registrations, filings or qualifications pursuant to Sections 2 and 3, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, FINRA filing fees (if any) and fees and disbursements of counsel for the Company shall be paid by the Company. In no event shall the Company be responsible for any broker or similar commissions of any Investor or, except to the extent expressly provided for in the Transaction Documents, any legal fees or other costs of the Investors.

6. Indemnification.

(a) To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend each Investor and each of its directors, officers, stockholders, members, partners, employees, agents, advisors, and representatives (each, an "**Indemnified Person**"), against any losses, obligations, claims, damages, liabilities, contingencies, judgments, fines, penalties, charges, costs (including, without limitation, court costs, reasonable attorneys' fees and costs of defense and investigation), amounts paid in settlement or expenses, joint or several, (collectively, "**Claims**") incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an Indemnified Person is or may be a party thereto ("**Indemnified Damages**"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other "blue sky" laws of any jurisdiction in which Registrable Securities are offered ("**Blue Sky Filing**"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus if used prior to the effective date of such Registration Statement and not corrected prior to the effective date of such Registration Statement, or contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading, (iii) any violation or alleged violation by the Company of the 1933 Act, the 1934 Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to a Registration Statement or (iv) any violation of this Agreement (the matters in the foregoing clauses (i) through (iii) being, collectively, "**Violations**"); provided, however, that the Company shall not be liable in any such case to the extent that any such claim, loss, damage, liability, or expense arises out of or is based upon such Indemnified Person's gross negligence, willful misconduct or fraud or any untrue statement or omission contained in such prospectus or other document based upon written information furnished to the Company by such Indemnified Person expressly for use in connection with such Registration Statement. Subject to Section 6(c), the Company shall reimburse the Indemnified Persons, promptly as such expenses are incurred and are due and payable, for reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim by an Indemnified Person arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished in writing to the Company by such Indemnified Person for such Indemnified Person expressly for use in connection with the preparation of such Registration Statement or any such amendment thereof or supplement thereto, if such prospectus was timely made available by the Company pursuant to Section 3(d); and (ii) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld or delayed. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the transfer of any of the Registrable Securities by any of the Investors pursuant to Section 9.

(b) In connection with any Registration Statement in which an Investor is participating, such Investor agrees to severally and not jointly indemnify, hold harmless and defend, to the same extent and in the same manner as is set forth in Section 6(a), the Company, each of its directors, each of its officers who signs the Registration Statement and each Person, if any, who controls the Company within the meaning of the 1933 Act or the 1934 Act (each, an "**Indemnified Party**"), against any Claim or Indemnified Damages to which any of them may become subject, under the 1933 Act, the 1934 Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case, to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with written information furnished to the Company by such Investor expressly for use in connection with such Registration Statement; and, subject to Section 6(c) and the below provisos in this Section 6(b), such Investor will reimburse an Indemnified Party any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending any such Claim; provided, however, the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of such Investor, which consent shall not be unreasonably withheld or delayed, provided further that such Investor shall be liable under this Section 6(b) for only that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to such Investor as a result of the applicable sale of Registrable Securities pursuant to such Registration Statement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Indemnified Party and shall survive the transfer of any of the Registrable Securities by any of the Investors pursuant to Section 9.

(c) Promptly after receipt by an Indemnified Person or Indemnified Party (as the case may be) under this Section 6 of notice of the commencement of any action or proceeding (including, without limitation, any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party (as the case may be) shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party (as the case may be); provided, however, an Indemnified Person or Indemnified Party (as the case may be) shall have the right to retain its own counsel with the fees and expenses of such counsel to be paid by the indemnifying party if: (i) the indemnifying party has agreed in writing to pay such fees and expenses; (ii) the indemnifying party shall have failed promptly to assume the defense of such Claim and to employ counsel reasonably satisfactory to such Indemnified Person or Indemnified Party (as the case may be) in any such Claim; or (iii) the named parties to any such Claim (including, without limitation, any impleaded parties) include both such Indemnified Person or Indemnified Party (as the case may be) and the indemnifying party, and such Indemnified Person or such Indemnified Party (as the case may be) shall have been advised by counsel that a conflict of interest is likely to exist if the same counsel were to represent such Indemnified Person or such Indemnified Party and the indemnifying party (in which case, if such Indemnified Person or such

Indemnified Party (as the case may be) notifies the indemnifying party in writing that it elects to employ separate counsel at the expense of the indemnifying party, then the indemnifying party shall not have the right to assume the defense thereof and such counsel shall be at the expense of the indemnifying party, provided further that in the case of clause (iii) above the indemnifying party shall not be responsible for the reasonable fees and expenses of more than one (1) separate legal counsel for such Indemnified Person or Indemnified Party (as the case may be). The Indemnified Party or Indemnified Person (as the case may be) shall reasonably cooperate with the indemnifying party in connection with any negotiation or defense of any such action or Claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person (as the case may be) which relates to such action or Claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person (as the case may be) reasonably apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent; provided, however, the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the prior written consent of the Indemnified Party or Indemnified Person (as the case may be), consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person (as the case may be) of a release from all liability in respect to such Claim or litigation, and such settlement shall not include any admission as to fault on the part of the Indemnified Party. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person (as the case may be) with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party (as the case may be) under this Section 6, except to the extent that the indemnifying party is materially and adversely prejudiced in its ability to defend such action.

(d) The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

(e) The indemnity and contribution agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

7. Contribution.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations; provided, however: (i) no contribution shall be made under circumstances where the maker would not have been liable for indemnification under the fault standards set forth in Section 6 of this Agreement, (ii) no Person involved in the sale of Registrable Securities which Person is guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) in connection with such sale shall be entitled to contribution from any Person involved in such sale of Registrable Securities who was not guilty of fraudulent misrepresentation; and (iii) contribution by any seller of Registrable Securities shall be limited in amount to the amount of net proceeds received by such seller from the applicable sale of such Registrable Securities pursuant to such Registration Statement. Notwithstanding the provisions of this Section 7, no Investor shall be required to contribute, in the aggregate, any amount in excess of the amount by which the net proceeds actually received by such Investor from the applicable sale of the Registrable Securities subject to the Claim exceeds the amount of any damages that such Investor has otherwise been required to pay, or would otherwise be required to pay under Section 6(b), by reason of such untrue or alleged untrue statement or omission or alleged omission.

8. Reports Under the 1934 Act.

With a view to making available to the Investors the benefits of Rule 144, the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144;

(b) file with the SEC in a timely manner all reports and other documents required of the Company under the 1933 Act and the 1934 Act so long as the Company remains subject to such requirements (it being understood and agreed that nothing herein shall limit any obligations of the Company under the Securities Purchase Agreement) and the filing of such reports and other documents is required for the applicable provisions of Rule 144; and

(c) furnish to each Investor so long as such Investor owns Registrable Securities, promptly upon request, (i) a written statement by the Company, if true, that it has complied with the reporting, submission and posting requirements of Rule 144, the 1933 Act and the 1934 Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company with the SEC if such reports are not publicly available via EDGAR, and (iii) such other information as may be reasonably requested to permit the Investors to sell such securities pursuant to Rule 144 without registration.

9. Assignment of Registration Rights.

All or any portion of the rights under this Agreement shall be automatically assignable by each Investor to any transferee or assignee (as the case may be) of all or any portion of such Investor's Registrable Securities, Preferred Shares or Warrants if: (i) such Investor agrees in writing with such transferee or assignee (as the case may be) to assign all or any portion of such rights, and a copy of such agreement is furnished to the Company within a reasonable time after such transfer or assignment (as the case may be); (ii) the Company is, within a reasonable time after such transfer or assignment (as the case may be), furnished with written notice of (a) the name and address of such transferee or assignee (as the case may be), and (b) the securities with respect to which such registration rights are being transferred or assigned (as the case may be); (iii) immediately following such transfer or assignment (as the case may be) the further disposition of such securities by such transferee or assignee (as the case may be) is restricted under the 1933 Act or applicable state securities laws if so required; (iv) at or before the time the Company receives the written notice contemplated by clause (ii) of this sentence such transferee or assignee (as the case may be) agrees in writing with the Company to be bound by all of the provisions contained herein; (v) such transfer or assignment (as the case may be) shall have been made in accordance with the applicable requirements of the Securities Purchase Agreement, the Certificate of Designations and the Warrants (as the case may be); and (vi) such transfer or assignment (as the case may be) shall have been conducted in accordance with all applicable federal and state securities laws.

10. Amendment of Registration Rights.

Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and all of the Required Holders; provided that any such amendment or waiver that complies with the foregoing, but that disproportionately, materially and adversely affects the rights and obligations of any Investor relative to the comparable rights and obligations of the other Investors shall require the prior written consent of such adversely affected Investor. Any amendment or waiver effected in accordance with this Section 10 shall be binding upon each Investor and the Company, provided that no such amendment shall be effective to the extent that it (1) applies to less than all of the holders of Registrable Securities or (2) imposes any obligation or liability on any Investor without such Investor's prior written consent (which may be granted or withheld in such Investor's sole discretion). No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. 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 (other than the reimbursement of legal fees) also is offered to all of the

parties to this Agreement.

11. Miscellaneous.

(a) Solely for purposes of this Agreement, a Person is deemed to be a holder of Registrable Securities whenever such Person owns, or is deemed to own, of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company shall act upon the basis of instructions, notice or election received from such record owner of such Registrable Securities.

(b) Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by electronic mail (provided that such sent email is kept on file (whether electronically or otherwise) by the sending party and the sending party does not receive an automatically generated message from the recipient's email server that such e-mail could not be delivered to such recipient); or (iii) one (1) Business Day after deposit with an overnight courier service with next day delivery specified, in each case, properly addressed to the party to receive the same. The mailing addresses and e-mail addresses for such communications shall be:

If to the Company:

MyMD Pharmaceuticals, Inc.
855 N. Wolfe Street, Suite 623
Baltimore, MD 21205
Attention: Christopher C. Chapman
Telephone: (856) 848-8698
Email: cchapman@mymd.com

With a copy (for informational purposes only) to:

Haynes and Boone, LLP
30 Rockefeller Plaza, 26th Floor
New York, New York 10112
Telephone: (212) 659-7300
Attention: Rick Werner
Email: rick.werner@haynesboone.com

If to the Transfer Agent:

Securities Transfer Corporation
2901 N. Dallas Parkway
Suite 380
Plano, Texas 75093

If to Legal Counsel:

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
919 3rd Avenue
New York, NY 10019
Telephone: (212) 935-3000
Attention: Kenneth R. Koch, Esq. or Daniel A. Bagliebter, Esq.
E-mail: krkoch@mintz.com or dabagliebter@mintz.com

If to a Buyer, to its mailing address and/or email address set forth on the Schedule of Buyers attached to the Securities Purchase Agreement, with copies to such Buyer's representatives as set forth on the Schedule of Buyers, or to such other mailing address and/or email address and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change, provided that Legal Counsel shall only be provided notices sent to the lead investor. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's e-mail containing the time, date and recipient's e-mail or (C) provided by a courier or overnight courier service shall be rebuttable evidence of personal service, receipt by e-mail or receipt from a nationally recognized overnight delivery service in accordance with clause (i), (ii) or (iii) above, respectively.

(c) Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof. The Company and each Investor acknowledge and agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that each party hereto shall be entitled to an injunction or injunctions to prevent or cure breaches of the provisions of this Agreement by any other party hereto 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), this being in addition to any other remedy to which any party may be entitled by law or equity.

(d) All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

(e) If any provision of this Agreement is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Agreement so long as this Agreement as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in

question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

(f) This Agreement, the other Transaction Documents, the schedules and exhibits attached hereto and thereto and the instruments referenced herein and therein constitute the entire agreement among the parties hereto and thereto solely with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement, the other Transaction Documents, the schedules and exhibits attached hereto and thereto and the instruments referenced herein and therein supersede all prior agreements and understandings among the parties hereto solely with respect to the subject matter hereof and thereof; provided, however, nothing contained in this Agreement or any other Transaction Document shall (or shall be deemed to) (i) have any effect on any agreements any Investor has entered into with the Company or any of its Subsidiaries prior to the date hereof with respect to any prior investment made by such Investor in the Company, (ii) waive, alter, modify or amend in any respect any obligations of the Company or any of its Subsidiaries or any rights of or benefits to any Investor or any other Person in any agreement entered into prior to the date hereof between or among the Company and/or any of its Subsidiaries and any Investor and all such agreements shall continue in full force and effect or (iii) limit any obligations of the Company under any of the other Transaction Documents.

(g) Subject to compliance with Section 9 (if applicable), this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto. This Agreement is not for the benefit of, nor may any provision hereof be enforced by, any Person, other than the parties hereto, their respective permitted successors and assigns and the Persons referred to in Sections 6 and 7 hereof.

(h) The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof. Unless the context clearly indicates otherwise, each pronoun herein shall be deemed to include the masculine, feminine, neuter, singular and plural forms thereof. The terms "including," "includes," "include" and words of like import shall be construed broadly as if followed by the words "without limitation." The terms "herein," "hereunder," "hereof" and words of like import refer to this entire Agreement instead of just the provision in which they are found.

(i) This Agreement may be executed in two or more identical counterparts, each of which shall be deemed an original, but all of which 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. In the event that any signature is delivered by facsimile or electronic transmission (including DocuSign and similar) or by an email which contains a portable document format (.pdf) file of an executed signature page, such signature page 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 signature page were an original thereof.

(j) 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 any 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) 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. Notwithstanding anything to the contrary set forth in Section 10, terms used in this Agreement but defined in the other Transaction Documents shall have the meanings ascribed to such terms on the Closing Date in such other Transaction Documents unless otherwise consented to in writing by each Investor.

(l) All consents and other determinations required to be made by the Investors pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by the Required Holders, determined as if all of the outstanding Preferred Shares then held by the Investors have been converted for Registrable Securities without regard to any limitations on redemption, amortization and/or conversion of the Preferred Shares and the outstanding Warrants then held by Investors have been exercised for Registrable Securities without regard to any limitations on exercise of the Warrants.

(m) 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.

(n) The obligations of each Investor under this Agreement and the other Transaction Documents are several and not joint with the obligations of any other Investor, and no Investor shall be responsible in any way for the performance of the obligations of any other Investor under this Agreement or any other Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Investor pursuant hereto or thereto, shall be deemed to constitute the Investors as, and the Company acknowledges that the Investors do not so constitute, a partnership, an association, a joint venture or any other kind of group or entity, or create a presumption that the Investors are in any way acting in concert or as a group or entity with respect to such obligations or the transactions contemplated by the Transaction Documents or any matters, and the Company acknowledges that the Investors are not acting in concert or as a group, and the Company shall not assert any such claim, with respect to such obligations or the transactions contemplated by this Agreement or any of the other the Transaction Documents. Each Investor shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of any other Transaction Documents, and it shall not be necessary for any other Investor 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 herein was solely in the control of the Company, not the action or decision of any Investor, and was done solely for the convenience of the Company and not because it was required or requested to do so by any Investor. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company and an Investor, solely, and not between the Company and the Investors collectively and not between and among Investors.

[signature page follows]

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Registration Rights Agreement to be duly executed as of the date first written above.

COMPANY:

MYMD PHARMACEUTICALS, INC.

By: _____
Name: Chris Chapman, M.D.
Title: President and Chief Medical Officer

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Registration Rights Agreement to be duly executed as of the date first written above.

BUYERS:

By: _____
Name: _____
Title: _____

EXHIBIT A
SELLING STOCKHOLDERS

The shares of common stock being offered by the selling stockholders are those issuable to the selling stockholders upon conversion of the preferred shares and exercise of the warrants. For additional information regarding the issuance of the preferred shares and the warrants, see "Private Placement of Preferred Shares and Warrants" above. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time. Except for the ownership of the preferred shares and the warrants issued pursuant to the Securities Purchase Agreement, the selling stockholders have not had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder) of the shares of common stock held by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by the selling stockholders, based on their respective ownership of shares of common stock, preferred shares and warrants, as of _____, 20__, assuming conversion of the preferred shares and exercise of the warrants held by each such selling stockholder on that date but taking account of any limitations on conversion and exercise set forth therein.

The third column lists the shares of common stock being offered by this prospectus by the selling stockholders and does not take in account any limitations on (i) conversion of the preferred shares set forth therein or (ii) exercise of the warrants set forth therein.

In accordance with the terms of a registration rights agreement with the holders of the preferred shares and the warrants, this prospectus generally covers the resale of the sum of (i) the maximum number of shares of common stock issued or issuable pursuant to the Certificate of Designations, including payment of interest on the preferred shares through [DATE], and (ii) the maximum number of shares of common stock issued or issuable upon exercise of the warrants, in each case, determined as if the outstanding preferred shares (including interest on the preferred shares through [DATE]) and warrants were converted or exercised (as the case may be) in full (without regard to any limitations on conversion or exercise contained therein solely for the purpose of such calculation) at the floor price or exercise price (as the case may be) calculated as of the trading day immediately preceding the date this registration statement was initially filed with the SEC. Because the conversion price of the preferred shares and the exercise price of the warrants may be adjusted, the number of shares that will actually be issued may be more or less than the number of shares being offered by this prospectus. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

Under the terms of the Certificate of Designations and the warrants, certain of our selling stockholders may not convert the preferred shares or exercise the warrants to the extent (but only to the extent) such selling stockholder or any of its affiliates would beneficially own a number of shares of our shares of common stock which would exceed 19.99% of the outstanding shares of the Company. The number of shares in the second column reflects these limitations. The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

<u>Name of Selling Stockholder</u>	<u>Number of shares of Common Stock Owned Prior to Offering</u>	<u>Maximum Number of shares of Common Stock to be Sold Pursuant to this Prospectus</u>	<u>Number of shares of Common Stock of Owned After Offering</u>
------------------------------------	---	--	---

[LEAD INVESTOR] (1)
[OTHER BUYERS]

(1) []

EXHIBIT B
PLAN OF DISTRIBUTION

We are registering the shares of common stock issuable upon conversion of the preferred shares and exercise of the warrants to permit the resale of these shares of common stock by the holders of the preferred shares and warrants from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of common stock, although we will receive the exercise price of any warrants not exercised by the selling stockholders on a cashless exercise basis. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling stockholders may sell all or a portion of the shares of common stock held by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales made after the date the Registration Statement is declared effective by the SEC;
- broker-dealers may agree with a selling security holder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares of common stock under Rule 144 promulgated under the Securities Act of 1933, as amended, if available, rather than under this prospectus. In addition, the selling stockholders may transfer the shares of common stock by other means not described in this prospectus. If the selling stockholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling stockholders may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares.

The selling stockholders may pledge or grant a security interest in some or all of the preferred shares, warrants or shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the selling stockholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the common stock. All of the foregoing may affect the marketability of the common stock and the ability of any person or entity to engage in market-making activities with respect to the common stock.

We will pay all expenses of the registration of the shares of common stock pursuant to the registration rights agreement, estimated to be \$[] in total, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act in accordance with the registration rights agreements or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related registration rights agreements or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

OMNIBUS WAIVER, CONSENT, NOTICE AND AMENDMENT

This Omnibus Waiver, Consent and Amendment (this “Agreement”), dated as of May 20, 2024, is by and among MyMD Pharmaceuticals, Inc., a Delaware corporation (the “Company”), and the investor listed on the signature page attached hereto (the “Investor”).

WITNESSETH

WHEREAS, the Company and the Investor are party to that certain Securities Purchase Agreement, dated as of February 21, 2023 (the “Purchase Agreement”), pursuant to which the Company issued to the Investor shares of the Company’s Series F Convertible Preferred Stock, par value \$0.001 per share (the “Preferred Stock”), the terms of which are set forth in the Amended and Restated Certificate of Designations (the “Certificate of Designations”), and a warrant (the “Warrant,” and, together with the Purchase Agreement and the Certificate of Designations, the “Transaction Documents”) to purchase shares of the Company’s common stock, par value \$0.001 per share (the “Common Stock”);

WHEREAS, the Company desires to enter into a securities purchase agreement, by and among the Company and certain investors party thereto (the “Series G Purchase Agreement”), pursuant to which the Company will sell to such investors in a private placement, (i) newly-designated shares of the Company’s Series G Convertible Preferred Stock, par value \$0.001 per share (the “Series G Preferred Stock”), (ii) warrants (the “Series G Long-Form Warrants”) to purchase shares of the Company’s Common Stock with a term of five (5) years from the date of issuance, and (iii) warrants (the “Series G Short-Form Warrants,” and together with the Series G Long-Form Warrants, the “Series G Warrants”) to purchase shares of the Company’s Common Stock with a term of eighteen (18) months from the date of issuance on the terms set forth in the Term Sheet attached as Exhibit A hereto (the “Series G Private Placement”);

WHEREAS, the Company desires to enter into a securities purchase agreement, by and among the Company and certain investors party thereto (the “Series F-1 Purchase Agreement,” and together with the Series G Purchase Agreement, the “Purchase Agreements”), pursuant to which the Company will issue and sell to such investors in a private placement, (i) newly-designated shares of the Company’s Series F-1 Convertible Preferred Stock, par value \$0.001 per share (the “Series F-1 Preferred Stock”), (ii) warrants to purchase shares of the Company’s Common Stock with a term of five (5) years from the date of issuance, and (iii) warrants to purchase shares of the Company’s Common Stock with a term of eighteen (18) months from the date of issuance (the “Series F-1 Private Placement,” and together with the Series G Private Placement, the “Private Placements”);

WHEREAS, in connection with the Private Placements, the Company desires to amend the Company’s Amended and Restated Certificate of Incorporation (the “Charter Amendment”) to increase the number of authorized shares of the Company’s Common Stock and to make a corresponding change to the number of authorized shares of capital stock of the Company, and to submit the Charter Amendment to the Company’s stockholders for their approval at a special meeting of stockholders of the Company (such approval, the “Stockholder Approval”); and

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WHEREAS, the Company and the Investor desire to waive the applicability of certain provisions of the Transaction Documents, consent to certain actions of the Company in connection with the Private Placements, and to amend certain other provisions of the Transaction Documents.

NOW, THEREFORE, in consideration of the premises and mutual covenants and obligations hereinafter set forth, the parties hereto, intending legally to be bound, hereby agree as follows:

1. Definitions. Capitalized terms used herein but not otherwise defined herein shall have the respective meanings given such terms in the Purchase Agreement.
2. Waivers.
 - (a) Waiver of Variable Rate Transaction. Solely for the purposes of enabling the consummation of the Private Placements, the Investor hereby waives any right such Investor is entitled to pursuant to Section 4.(n) of the Purchase Agreement, relating to the Company’s prohibition of effecting or entering into an agreement to effect any Subsequent Placement involving a Variable Rate Transaction.
 - (b) Waiver of Participation Rights. The Investor hereby waives any rights of first refusal or participation rights with respect to the Private Placements, including, but not limited to, the Investor’s participation rights under Section 4(o) of the Purchase Agreement and the Investor’s Purchase Rights (as defined in the Certificate of Designations) under Section 7 of the Certificate of Designations, and waives any applicable notices related thereto.
 - (c) Waiver of Authorized Shares. Unless and until the Stockholder Approval is obtained, the Investor hereby waives the Company’s obligation to reserve a sufficient number of shares of Common Stock that constitutes the Required Reserve Amount pursuant to the Transaction Documents.
 - (d) Waiver of Fundamental Transaction. The Investor hereby agrees that the issuance and sale by the Company of the (i) newly designated shares of the Company’s Series G Convertible Preferred Stock, and (ii) the Series G Warrants, pursuant to the Series G Purchase Agreement, shall not constitute a Fundamental Transaction (as defined in the Certificate of Designations and Warrant).
3. Consent. The Investor hereby consents, pursuant to Section 2 and Section 18 of the Certificate of Designations relating to the Company’s creation, authorization (by reclassification or otherwise), issuance, purchase, repurchase, redemption or repayment of any class or series of Junior Stock (as defined in the Certificate of Designations), to the creation, authorization, issuance, purchase, repurchase, redemption and/or repayment by the Company of the Series G Preferred Stock and the Series F-1 Preferred Stock, provided that each authorized, but not otherwise reserved, share of the Company’s Common Stock shall be reserved for issuance to the holders of the Preferred Stock upon conversion and the Warrants upon exercise and may not be issued to any holders of the Series G Preferred Stock until the Company obtains Stockholder Approval.
4. Notice. The Investor hereby acknowledges that this Agreement constitutes notice, as required by Section 8(c) of the Certificate of Designations, to the Investor, to the extent Series G Preferred Stock and the Series F-1 Preferred Stock constitute Variable Price Securities (as defined in the Certificate of Designations), of the Company’s intention to issue and sell such Series G Preferred Stock and the Series F-1 Preferred Stock pursuant to the Private Placements.

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5. Amendment to the Certificate of Designations. The parties hereto hereby agree to amend the rights of the Preferred Stock as set forth in the Amendment to the Certificate of Designations attached as Exhibit B hereto (the “Amendment”). Upon the effectiveness of this Agreement, the Company shall promptly file the Amendment and provide a copy thereof to the Investor promptly after such filing.
6. Amendment to the Purchase Agreement. The parties hereto hereby agree to amend and restate Section 4(o)(i) of the Purchase Agreement to read as follows:

(i) At least two (2) Trading Days prior to any proposed or intended Subsequent Placement, the Company shall deliver to each Buyer a written notice (each such notice, a "Pre-Notice"), which Pre-Notice shall not contain any information (including, without limitation, material, non-public information) other than: (A) if the proposed Offer Notice (as defined below) constitutes or contains material, non-public information, a statement asking whether the Investor is willing to accept material non-public information or (B) if the proposed Offer Notice does not constitute or contain material, non-public information, (x) a statement that the Company proposes or intends to effect a Subsequent Placement, (y) a statement that the statement in clause (x) above does not constitute material, non-public information and (z) a statement informing such Buyer that it is entitled to receive an Offer Notice (as defined below) with respect to such Subsequent Placement upon its written request. Upon the written request of a Buyer within three (3) Trading Days after the Company's delivery to such Buyer of such Pre-Notice, and only upon a written request by such Buyer, the Company shall promptly, but no later than one (1) Trading Day after such request, deliver to such Buyer an irrevocable written notice (the "Offer Notice") of any proposed or intended issuance or sale or exchange (the "Offer") of the securities being offered (the "Offered Securities") in a Subsequent Placement, which Offer Notice shall (A) identify and describe the Offered Securities, (B) describe the price and other terms upon which they are to be issued, sold or exchanged, and the number or amount of the Offered Securities to be issued, sold or exchanged, (C) identify the Persons (if known) to which or with which the Offered Securities are to be offered, issued, sold or exchanged and (D) offer to issue and sell to or exchange with such Buyer in accordance with the terms of the Offer such Buyer's pro rata portion of 33 1/3% of the Offered Securities, provided that the number of Offered Securities which such Buyer shall have the right to subscribe for under this Section 4(o) shall be (x) based on such Buyer's pro rata portion of the aggregate stated value of the Preferred Shares purchased hereunder by all Buyers (the "Basic Amount"), and (y) with respect to each Buyer that elects to purchase its Basic Amount, any additional portion of the Offered Securities attributable to the Basic Amounts of other Buyers as such Buyer shall indicate it will purchase or acquire should the other Buyers subscribe for less than their Basic Amounts (the "Undersubscription Amount"), which process shall be repeated until each Buyer shall have an opportunity to subscribe for any remaining Undersubscription Amount.

7. Counterparts; Facsimile Execution. This Agreement may be executed in one or more counterparts (including by electronic mail, in PDF or by DocuSign or similar electronic signature), all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docuSign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.
8. Governing Law. THIS AGREEMENT SHALL BE SUBJECT TO THE PROVISIONS REGARDING GOVERNING LAW SET FORTH IN SECTION 9(A) OF THE PURCHASE AGREEMENT, AND SUCH PROVISIONS ARE INCORPORATED HEREIN BY THIS REFERENCE, *MUTATIS MUTANDIS*.
9. Terms and Conditions of the Transaction Documents. Except as modified and amended herein, all of the terms and conditions of the Transaction Documents shall remain in full force and effect.

[Signature pages follow immediately.]

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[Company Signature Page to Omnibus Waiver, Consent, Notice and Amendment]

IN WITNESS WHEREOF, the undersigned has executed and delivered this Agreement as of the date first above written.

Company:

MYMD PHARMACEUTICALS, INC.

By: _____

Name:

Title:

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[Investor Signature Page to Omnibus Waiver, Consent, Notice and Amendment]

IN WITNESS WHEREOF, the undersigned has executed and delivered this Agreement as of the date first above written.

Name of Investor:

By: _____

Name of signatory:

Title:

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Exhibit A

MyMD Pharmaceuticals, Inc.

Term Sheet for Offering of Convertible Preferred Stock and Warrants

The following summary of the material terms of the transaction documents entered into in connection with MyMD Pharmaceuticals, Inc.'s (the "Company") issuance and sale of Convertible Preferred Stock and warrants does not purport to be complete and is qualified in its entirety by reference to the full text of such transaction documents.

Issue: The Company will sell to the Investors \$8,950,000 of Convertible Preferred Stock ("Preferred") with Long-Term Warrants and Short-Term Warrants to purchase shares of common stock (collectively, the "Warrants").

Lead Investor: PharmaCyte Biotech, Inc. (the "Lead Investor")

Closing Date: May 2024.

Dividend Rate on Preferred:	10.0% per annum, paid monthly either (i) in cash or (ii) “in kind” in the form of additional Preferred (“PIK Preferred”), at the Investor’s option (with such “in kind” payment calculated based off the 5 day average closing price of the Company’s common stock for the 5 trading days prior to the payment date).
Voting Rights:	The Preferred will vote on an as-converted basis with the Company’s common stock.
Conversion Price:	The Conversion Price shall be the lesser of: (1) 80% of the 5 day average closing price of the Company’s common stock ending on the trading day immediately prior to the date on which documents are executed; and (2) \$2.50. The Conversion Price of the Preferred shall be subject to full ratchet anti-dilution protection, make-whole interest provisions for a year following conversion, and customary adjustments for stock splits, dividends, recapitalizations, and similar events.
Long-Term Warrants:	100% coverage on the Preferred, shall have a five (5) year term with an exercise price equal to the Conversion Price. The Warrant will have full ratchet anti-dilution provisions and customary adjustments for stock splits, dividends, recapitalizations, and similar events.
Short-Term Warrants:	100% coverage on the Preferred, shall have an eighteen (18) month term with an exercise price equal to the Conversion Price. The Warrant will have full ratchet anti-dilution provisions and customary adjustments for stock splits, dividends, recapitalizations, and similar events.
Registration:	The Company will, at its expense, file a Registration Statement on Form S-3 (the “Resale Registration Statement”) that registers for resale by the Investors 200% of the shares of Common Stock issuable upon conversion of the Preferred (including any PIK Preferred) and exercise of the Warrants (the “Registrable Securities”). The Company will use its reasonable best efforts to file the Resale Registration Statement for the resale of the Registrable Securities within 30 days of the closing of the Transaction and have the Resale Registration Statement declared effective within 90 days of the closing of the Transaction (or, in the event of SEC review, within 120 days of the closing of the Transaction).
Stockholder Approval:	The Company will seek stockholder approval (i) to authorize, for purposes of complying with Nasdaq Listing Rules 5625(b) and 5635(d), the issuance or potential issuance of the shares of common stock underlying the Preferred and Warrants in an amount that may result in a change of control and in amount equal to or in excess of 20% of the common stock outstanding before the closing of the Transaction and (ii) to increase the authorized shares of the Company to ensure that the number of authorized shares is sufficient to meet the reservation requirement with respect to the shares of common stock underlying the Preferred and Warrants. The Company has agreed to seek such stockholder approval at a meeting to be held no later than August 1, 2024, and to file a proxy statement for such meeting within 45 days of the closing of the Transaction.
Negative Financing Covenant:	The Company shall not issue any equity or equity-linked securities until the Stockholder Approval Date.
Right of Participation:	The Investors, for a period of two (2) years from closing, shall have a right of participation for future financings undertaken by the Company while any Preferred remain outstanding.
Seniority:	The Preferred will be <i>pari passu</i> with any other preferred stock on the Company’s balance sheet (except for the Company’s Series F Convertible Preferred Stock, to which it will be junior) with no future securities senior to it on the cap table until 80% or more of the Preferred has been converted.
Board Composition:	At the closing of the Transaction, the board of directors of the Company will be comprised of eight members, one of whom will be designated by the Lead Investor.
Legal Fees:	At the closing, the Company will pay all of Investors; legal fees and expenses, related to this Transaction, in an amount of one hundred thousand dollars (USD \$100,000.00), twenty-five thousand dollars (USD \$25,000.00) of which shall be advanced as a condition to commence documentation and the balance upon funding.

Exhibit B

**Form Amendment to the Amended and Restated Certificate of Designations
of Series F Convertible Preferred Stock**

MyMD Pharmaceuticals Secures Strategic Investments

Up to \$42 Million in Two-Part Funding from New Strategic Investor and Existing Shareholders with Committed Closing of an Aggregate of \$14 Million Up Front

BALTIMORE — May 21, 2024 — MyMD Pharmaceuticals, Inc.® (Nasdaq: MYMD) (“MyMD” or “the Company”), a clinical stage biopharmaceutical company committed to developing novel therapies for age-related diseases, and autoimmune and inflammatory conditions, today announced that it has secured \$7 million in commitments in two private placement funding rounds led by a strategic investor, PharmaCyte Biotech, Inc. (Nasdaq: PMCB), a clinical-stage biotechnology company developing cellular therapies for cancer and diabetes. An additional \$7 million was raised from existing MyMD shareholders participating in the offerings. The closings of the two private placements are each subject to customary closing conditions and are both expected to occur on or around May 22, 2024.

“We are excited to welcome PharmaCyte as a new strategic investment partner in our continuing development of MYMD-1 in sarcopenia, as well as the evaluation of our other approved INDs in rheumatoid arthritis (RA) and Hashimoto’s thyroiditis,” said Chris Chapman, M.D., President, Chief Medical Officer, and Director of MyMD. “Likewise, we appreciate the participation of many of our valued existing shareholders who share strong conviction in our potentially groundbreaking drug candidates for combatting aging and treating autoimmune diseases. We believe that this capital infusion will fund us through our next clinical studies of MYMD-1 in sarcopenia for the next two years.”

Under the terms of the purchase agreement for MyMD’s Series G Preferred Stock financing round, PharmaCyte will receive 7,000 shares of Series G Preferred Stock with a stated value of \$1,000 per share, convertible into shares of MYMD common stock, and warrants to purchase up to an aggregate amount of 7,709,252 additional shares of common stock, for a total consideration of approximately \$7,000,000. In addition, existing shareholders will receive 1,950 aggregate shares of Series G Preferred Stock with a stated value of \$1,000 per share, convertible into shares of MYMD common stock, and warrants to purchase up to an aggregate amount of 2,147,580 additional shares of common stock, for a total consideration of \$1,950,000. The shares of Series G Preferred Stock have an initial conversion price of \$1.816 per share. The warrants issued in the Series G Preferred Stock offering are immediately exercisable at an initial exercise price of \$1.816 per share, and (i) certain of the warrants expire five years from the date of issuance, and (ii) certain of the warrants expire 18 months from the date of issuance.

Under the terms of the purchase agreement for MyMD’s Series F-1 Preferred Stock financing round, existing shareholders will receive 5,050 aggregate shares of Series F-1 Preferred Stock with a stated value of \$1,000 per share, convertible into shares of MYMD common stock, and warrants to purchase up to an aggregate amount of 5,561,678 additional shares of common stock, for a total consideration of \$5,050,000. The shares of Series F-1 Preferred Stock have an initial conversion price of \$1.816 per share. The warrants issued in the Series F-1 Preferred Stock offering are exercisable immediately at an initial exercise price of \$1.816 per share, and (i) certain of the warrants expire five years from the date of issuance, and (ii) certain of the warrants expire 18 months from the date of issuance.

The full conversion of the Series F-1 and Series G preferred stock and the full exercise of the accompanying warrants are subject to stockholder approval. For a full description of the terms of these financings, please see the Company’s Current Report on Form 8-K that was filed with the U.S. Securities and Exchange Commission today, including the attached exhibits.

The securities in each offering were offered and sold in transactions exempt from the registration requirements of the Securities Act of 1933, as amended (the “Securities Act”), pursuant to the exemption for transactions by an issuer not involving any public offering under Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D of the Securities Act and in reliance on similar exemptions under applicable state laws.

This press release is not an offer to sell, or a solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such an offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

About MYMD-1

MyMD has reported statistically significant positive topline Phase 2 results for its next generation oral TNF- α Inhibitor MYMD-1® in sarcopenia/age-related frailty. The Phase 2 study met its primary endpoints of significantly reducing chronic inflammatory markers in patients treated with MYMD-1. MYMD-1 holds potential to be the first drug approved by the FDA for sarcopenia, an age-related decline in physical function which leads to greater risk of hospitalization, disability, and death.

About MyMD Pharmaceuticals, Inc.

MyMD Pharmaceuticals, Inc. (Nasdaq: MYMD), a clinical stage pharmaceutical company committed to extending healthy lifespan, is focused on developing two novel therapeutic platforms that treat the causes of disease rather than only addressing the symptoms. MYMD-1 is a drug platform based on a clinical stage small molecule that regulates the immune system to control TNF- α , which drives chronic inflammation, and other pro-inflammatory cell signaling cytokines. MYMD-1 is being developed to delay aging, increase longevity, and treat autoimmune diseases. The Company’s second drug platform, Supera-CBD, is being developed to treat chronic pain, addiction and epilepsy. Supera-CBD is a novel synthetic derivative of cannabidiol (CBD) and is being developed to address and improve upon the rapidly growing CBD market, which includes both FDA approved drugs and CBD products not currently regulated as drugs. For more information, visit www.mymd.com.

Cautionary Statement Regarding Forward-Looking Statements

This press release may contain forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any expected future results, performance, or achievements. Forward-looking statements speak only as of the date they are made and none of MyMD nor its affiliates assume any duty to update forward-looking statements. Words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “may,” “plan,” “will,” “would” and other similar expressions are intended to identify these forward-looking statements. Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements include, without limitation: the completion of the private placements and the satisfaction of customary closing conditions related to the private placements, the anticipated use of proceeds therefrom, the effect that the reverse stock split may have on the price of MyMD’s common stock; MyMD’s ability to maintain compliance with the Nasdaq Stock Market’s listing standards; the timing of, and MyMD’s ability to, obtain and maintain regulatory approvals for clinical trials of MyMD’s pharmaceutical candidates; the timing and results of MyMD’s planned clinical trials for its pharmaceutical candidates; the amount of funds MyMD requires for its pharmaceutical candidates; increased levels of competition; changes in political, economic or regulatory conditions generally and in the markets in which MyMD operates; MyMD’s ability to retain and attract senior management and other key employees; MyMD’s ability to quickly and effectively respond to new technological developments; and MyMD’s ability to protect its trade secrets or other proprietary rights, operate without infringing upon the proprietary rights of others and prevent others from infringing on MyMD’s proprietary rights. A discussion of these and other factors with respect to MyMD is set forth in the Company’s Annual Report on Form 10-K for the year ended December 31, 2023, filed by MyMD on April 1, 2024 and subsequent reports that MyMD files with the Securities and Exchange Commission. Forward-looking statements speak only as of the date they are made and MyMD disclaims any intention or obligation to revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Investor Contact:

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