

**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): **April 30, 2026**

**SHUTTLE PHARMACEUTICALS HOLDINGS, INC.**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction  
of incorporation)

001-41488  
(Commission  
File Number)

82-5089826  
(IRS Employer  
Identification No.)

401 Professional Drive, Suite 260  
Gaithersburg, MD 20879  
(Address of principal executive offices) (Zip Code)

(240) 430-4212  
(Registrant's telephone number, including area code)

N/A  
(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 \$0.00001 per share	SHPH	The Nasdaq Stock Market LLC

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.**

**Merger Agreement**

**General Description of the Merger Agreement**

On April 30, 2026, Shuttle Pharmaceuticals Holdings, Inc., a Delaware corporation ("**Shuttle**" or "**Acquiror**"), entered into an Agreement and Plan of Merger (the "**Merger Agreement**") with Shuttle Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Shuttle ("**Merger Sub**") and United Dogecoin Inc., a Delaware corporation (the "**Company**"). The transactions contemplated by the Merger Agreement are referred to herein as the "**Transactions**" and the closing of the Transactions is referred to herein as the "**Closing**".

Pursuant to the terms and conditions of the Merger Agreement, immediately prior to the Closing, the Acquiror will file a certificate of merger (the "**Certificate of Merger**") with the Secretary of State of the State of Delaware (such time of the filing of the Certificate of Merger, the "**Effective Time**"), in accordance with the General Corporation Law of the State of Delaware. Pursuant to the Certificate of Merger, Merger Sub will be merged with and into the Company (the "**Merger**"), with the Company surviving the Merger as the Surviving Corporation (as defined in the Merger Agreement). As a result of the Merger, the Company will become a direct wholly owned subsidiary of Acquiror. At the Effective Time, all of the property, rights, privileges, powers and franchises of the Company and Merger Sub will vest in the Surviving Corporation and all of the debts, liabilities and duties of the Company and Merger Sub will become the debts, liabilities and duties of the Surviving Corporation. The Closing is expected to occur on Monday, May 4, 2026 (the "**Closing Date**").

**Transaction Consideration**

At the Effective Time, by virtue of the Merger and without any action on the part of the Company, Acquiror, Merger Sub or the holders of any existing common stock of the Company (the "**Existing Company Common Stock**"): (i) each share of common stock of Merger Sub, issued and outstanding immediately prior to the Effective Time will be converted into one validly issued, fully paid and nonassessable share of common stock of the Company (the "**Company Common Stock**"); and (ii) each share of Existing Company Common Stock of the Company (collectively, the "**Existing Company Stock**") issued and outstanding immediately prior to the Effective Time will be canceled and converted into the right to receive a portion of the Merger Consideration (as defined herein), consisting of a newly designated Series B-1 convertible preferred stock, par value \$0.00001 per share, of the Acquiror (the "**Series B-1 Preferred Stock**"), with each holder of such shares receiving, for each share of Existing Company Stock held immediately prior to the Effective Time, a pro rata portion of the Merger Consideration. The shares of Series B-1 Preferred Stock issued in connection with the Merger is referred to as the "**Merger Consideration**." Shuttle intends to file a Certificate of Designations, Preferences, and Rights of the Series B-1 Preferred Stock, immediately prior to the Closing.

Subject to the receipt by the Acquiror of stockholder approval (the "**Requisite Approval**") for the issuance of shares of common stock in connection with the conversion of the Series B-1 Preferred Stock (the "**B-1 Share Conversion**"), each share of Series B-1 Preferred Stock will be convertible into 4,033 shares of common stock of the Acquiror, par value \$0.00001 (the "**Acquiror Common Stock**") with an initial conversion price of \$1.24 per share, subject to adjustment and subject to a beneficial ownership limitation of 4.99% (or up to 19.99% at the election of the holder).

In addition, holders of Existing Company Stock shall be entitled to receive up to 118,038,551 pre-funded warrants ("**Pre-Funded Warrants**") exercisable for a like number of shares of Acquiror Common Stock upon the new wholly-owned subsidiary meeting certain Milestone Events (as defined in the Merger Agreement). Such Pre-Funded Warrants will be issuable only in the event the Acquiror obtains the Requisite Approval.

**Representations and Warranties**

The Merger Agreement contains a number of representations and warranties made by Acquiror, the Company, and Merger Sub as of the date of the Merger Agreement or other specific dates solely for the benefit of certain of the parties to the Merger Agreement, which in certain cases are subject to specified exceptions and materiality, Company Material Adverse Effect or Acquiror Material Adverse Effect (each as defined in the Merger Agreement), knowledge and other qualifications contained in the Merger Agreement or in information provided pursuant to certain disclosure schedules to the Merger Agreement.

In the Merger Agreement, the Company made certain customary representations to Acquiror including among others, related to the following: (1) corporate matters, including due organization, existence and good standing; (2) corporate authority, approval and binding effect relating to execution and delivery of the Merger Agreement and other ancillary documents and non-contravention; (3) government approvals; (4) capitalization; (5) financial

statements and internal controls; (6) compliance with laws; (7) absence of certain conditions; (8) no undisclosed liabilities; (9) ownership and control of digital assets and other property and equipment; (10) litigation; (11) contracts; (12) employee benefit plans; (13) labor and employment; (14) taxes; (15) intellectual property; (16) data protection and data privacy; (17) information technology; (18) real property; (19) anti-bribery, trade controls compliance; (20) insurance; (21) competition regulation; (22) environmental matters; (23) customers and suppliers; (24) brokers; (25) affiliate agreements; and (26) assets.

In the Merger Agreement, Acquiror and Merger Sub made certain customary representations and warranties to the Company, including among others, related to the following: (1) corporate matters, including due organization, existence and good standing; (2) corporate authority, approval and binding effect relating to execution and delivery of the Merger Agreement and other ancillary documents, non-contravention and governmental approvals; (3) compliance with laws; (4) employee benefit plans; (5) indebtedness; (6) taxes; (7) brokers; (8) SEC reports, financial statements and the Sarbanes-Oxley Act; (9) business activities and absence of certain changes; (10) data protection and data privacy; (11) information technology; (12) litigation; (13) no outside reliance; (14) capitalization; (15) Nasdaq quotation; (16) affiliate agreements; (17) anti-bribery and economic sanctions; and (18) labor and employment.

### **Covenants of the Parties**

The Merger Agreement contains a number of covenant obligations of the Acquiror and the Company, as of the date of the Merger Agreement or other specific dates, as further set forth below.

In the Merger Agreement, among other things, the Company covenants to deliver to Acquiror, within seventy-five (75) days after the Closing Date, audited interim financial statements prepared in accordance with GAAP and Regulation S-X, along with any other financial statements required for the Proxy Statement, including pro forma financials.

In the Merger Agreement, among other things, the Acquiror covenants to: (1) provide the Company reasonable access to its properties, books, and personnel from Closing until the B-1 Share Conversion is effective (the "**Conversion Effective Time**"); (2) indemnify and hold harmless current and former directors and officers of both parties for pre-Closing matters to the fullest extent permitted by law and organizational documents, including advancement of expenses; (3) maintain or cause to be maintained, directors' and officers' liability insurance that provides (i) extended coverage for pre-Closing directors and officers for six years after the Effective Time and (ii) ongoing coverage for post-Closing directors and officers on terms consistent with market standards for companies of similar size and listing status; (4) from and after the Closing until the Conversion Effective Time, operate its business in the ordinary course consistent with past practice; (5) promptly following the Closing, and in any event no less than fifteen (15) Business Days following the Closing, cause the assets and liabilities of Acquiror existing immediately prior to the Closing to be transferred to a newly established Subsidiary of Acquiror, the purpose of which shall be to continue the current business and operations of Acquiror; (6) use its best efforts to consummate a private placement offering in an aggregate amount of at least \$10,000,000; and (7) prior to the B-1 Share Conversion, obtain conditional approval of its listing application from Nasdaq in connection with the Transactions.

In the Merger Agreement, among other things, Acquiror and the Company each jointly covenant to: (1) use commercially reasonable efforts to obtain any required government or regulatory consents, consents of third-parties, if required, and take such actions reasonably necessary to consummate the Transactions; (2) as promptly as practicable, to file a proxy statement to solicit votes of Acquiror stockholders for the approval of, among other things, the issuance of Acquiror Common Stock upon the conversion of the Series B-1 Preferred Stock; (3) transfer taxes, if any, shall be borne by the Acquiror; (4) that the Merger be treated as a "reorganization" within the meaning of Section 368(a) of the Code (the "Section 368 Treatment") and that the Merger and PIPE Financing be treated as an integrated transaction; (5) that each party shall not disclose any Confidential Information (as defined in the Merger Agreement) and shall issue a joint press release relating to the Merger; (6) promptly notify each respective party of certain matters as set forth in the Merger Agreement; (7) cooperate on the assumption of outstanding Company stock options by the Acquiror and the entry by the Acquiror into certain employment agreements with current employees of the Company.

In addition, effective at the Effective Time, the Acquiror has agreed that Ryan Trasolini, Chief Executive Officer of the Company, shall be appointed Co-Chief Executive Officer of the Acquiror.

### **Financial Advisor Fees**

In connection with the Merger, the Acquiror has agreed to issue to E.F. Hutton & Co. (i) 750 shares of Series B-1 Preferred Stock convertible, subject to Requisite Approval, into 3,024,749 shares of Acquiror Common Stock at a conversion price of \$1.24 per share, subject to adjustment and subject to a beneficial ownership limitation of 4.99% (or up to 19.99% at the election of the holder), and (ii) Pre-Funded Warrants to purchase up to and aggregate of 11,066,114 shares of Acquiror Common Stock upon the achievement of the Milestone Events (subject to Requisite Approval).

### **Survival**

Subject to the limitations set forth in the Merger Agreement, the Surviving Representations (as defined in the Merger Agreement) shall survive the Effective Time until the date that is twelve (12) months from the Effective Time. Other than the Surviving Representations, none of the representations, warranties, covenants or agreements shall survive the Effective Time, other than (i) those covenants or agreements of the parties which by their terms apply, or are to be performed in whole or in part, after the Effective Time and (ii) covenants and agreements related to Tax Treatment, as set forth in greater detail in the Merger Agreement.

*A copy of the Merger Agreement is filed with this Current Report on Form 8-K as Exhibit 2.1 and is incorporated herein by reference, and the foregoing description of the Merger Agreement is qualified in its entirety by reference thereto.*

*The Merger Agreement contains representations, warranties and covenants that the respective parties made to each other as of the date of such agreement or other specific dates. The assertions embodied in those representations, warranties and covenants were made for purposes of the contract among the respective parties and are subject to important qualifications and limitations agreed to by the parties in connection with negotiating such agreement. The Merger Agreement has been filed with this Current Report on Form 8-K in order to provide investors with information regarding its terms. It is not intended to provide any other factual information about the Acquiror, the Company or Merger Sub. In particular, the representations, warranties, covenants and agreements contained in the Merger Agreement, which were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to the Merger Agreement, may be subject to limitations agreed upon by the contracting parties (including being qualified by confidential disclosures made for the purposes of allocating contractual risk between the parties to the Merger Agreement instead of establishing these matters as facts) and may be subject to standards of materiality applicable to the contracting parties that differ from those applicable to investors and reports and documents filed with the SEC. Investors should not rely on the representations, warranties, covenants and agreements, or any descriptions thereof, as characterizations of the actual state of facts or condition of any party to the Merger Agreement. In addition, the representations, warranties, covenants and agreements and other terms of the Merger Agreement may be subject to subsequent waiver or modification. Moreover, information concerning the subject matter of the representations and warranties and other terms may change after the date of the Merger Agreement, which subsequent information may or may not be fully reflected in the Acquiror's public disclosures.*

### **PIPE Financing**

On April 30, 2026, the Acquiror entered into a Securities Purchase Agreement (the "**Securities Purchase Agreement**") with certain accredited investors party thereto (each, a "**Purchaser**" and collectively, the "**Purchasers**"), pursuant to which the Acquiror agreed to issue (i) \$11,000,000 of a newly designated Series B-2 convertible preferred stock, par value \$0.00001 (the "**Series B-2 Preferred Stock**") and (ii) common stock purchase warrants (the "**Common Warrants**") to purchase up to 100% of the number of shares of Common Stock underlying the Series B-2 Convertible Preferred Stock as of the Closing Date, exercisable for a period of three (3) years at an exercise price of \$1.03 per share (the "**PIPE Financing**"). Shuttle intends to file a Certificate of Designations, Preferences, and Rights of the Series B-2 Preferred Stock, immediately prior to the Closing.

Upon subsequent receipt of Stockholder Approval (as defined in the Securities Purchase Agreement), the shares of Series B-2 Convertible Preferred Stock will be automatically convertible (the "**B-2 Share Conversion**") and together with the B-1 Share Conversion, the "**Conversions**"), at a conversion price of \$1.03 (subject to adjustment), into an aggregate of approximately 9,708,738 shares of Company Common Stock, subject to customary beneficial ownership limitations.

In addition, the Acquiror agreed to issue to the Purchasers Pre-Funded Warrants to purchase 10,679,612 shares of Common Stock in the aggregate (for a total of up to 34,932,064 shares of Acquiror Common Stock (the "**Milestone Shares**") in the aggregate) if all three Milestone Events are achieved.

Under the Securities Purchase Agreement, the Acquiror is obligated to seek Stockholder Approval (as defined in the Securities Purchase Agreement) to, among other things, approve the issuance of Acquiror Common Stock upon the B-2 Conversion. The Pre-Funded Warrants will not be issuable until the Acquiror receives Stockholder Approval. Pursuant to the Securities Purchase Agreement, the Acquiror has agreed to file a registration statement (a "**Registration Statement**") which will have been declared effective within 15 days of receipt of Stockholder Approval (or declared effective within 45 days in the event the Securities and Exchange Commission (the "**Commission**") determines to review the Registration Statement). Notwithstanding anything to the contrary, in the event that no Milestone Shares (and/or Pre-Funded Warrants) have been issued pursuant to the Securities Purchase Agreement on or before the date that the Registration Statement is declared effective by the Commission, the Acquiror shall not be obligated to include any such Milestone Shares on such Registration Statement, and shall instead be obligated to include such Milestone Shares on a subsequent resale registration statement required to be filed and declared effective by the Commission within thirty (30) days of a Milestone Event.

*Copies of the Form of Common Warrant, Form of Pre-Funded Warrant and Securities Purchase Agreement are filed as Exhibits 4.1, 4.2 and 10.1, respectively, to this Current Report on Form 8-K and are incorporated herein by reference, and the foregoing description of the Common Warrant, Pre-Funded Warrant and Securities Purchase Agreement is qualified in their entirety by reference thereto.*

### **Placement Agency Agreement**

On April 30, 2026, the Company entered into a Placement Agency Agreement (the "**Placement Agency Agreement**") with E.F. Hutton & Co., as placement agent (the "**Placement Agent**"), pursuant to which the Placement Agent agreed to act as the Company's exclusive placement agent in connection with the PIPE Financing. The PIPE Financing was conducted on a reasonable best-efforts basis.

Pursuant to the Placement Agency Agreement, the Company agreed to pay the Placement Agent a cash fee equal to 8.0% of the gross proceeds of the PIPE Financing, plus a non-accountable expenses fee of 1.00% of the aggregate gross proceeds of the Offering and certain reimbursable expenses.

*The foregoing description of the Placement Agency Agreement is subject to, and qualified in its entirety by, the full text of such document, which is filed as Exhibit 10.2 to this report and is incorporated herein by reference.*

### **Second Amendment to Asset Purchase Agreement**

On April 30, 2026, the Acquiror entered into a Second Amendment (the "**Second Amendment**") to Asset Purchase Agreement (the "**Asset Purchase Agreement**") with 1563868 B.C. Ltd., a Canadian limited corporation and the Company's wholly owned subsidiary ("**Purchaser**"), 1542770 BC Ltd., a Canadian limited corporation ("**Seller**"), and ZhiTian (Andy) Zhang, an individual residing in Vancouver, Canada ("**Seller Guarantor**"), dated as of

November 20, 2025, as amended by that First Amendment to Asset Purchase Agreement, dated December 23, 2025 (the "First Amendment" and the Asset Purchase Agreement, as amended, the "APA").

Pursuant to the terms and conditions of the Second Amendment, on the Effective Date, the Acquiror will (i) issue 270 shares of Series B-1 Convertible Preferred Stock to Seller and (ii) pay \$3,646,642 in cash as payment of the First Installment Payment and Second Installment Payment (both as defined in the APA). In addition, pursuant to the Second Amendment, the Seller shall be entitled to receive up to three installments of Pre-Funded Warrants in connection with the Milestone Events, each installment exercisable for 1,281,438 shares of Common Stock (for a total of up to 3,844,314 shares of Common Stock if all three Milestone Events are achieved). In connection with the Amendment, Seller shall return to the Acquiror for cancellation, 320,496 shares of Common Stock issued to the Seller pursuant to the First Amendment.

The closing of the transactions contemplated under the Second Amendment will be consummated on the Closing Date.

The Second Amendment contains customary representations, warranties and covenants that were made solely for the benefit of the parties to the Second Amendment.

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The foregoing description of the Second Amendment is qualified by reference to the full text of the Second Amendment, a copy of which is attached as Exhibit 10.3 to this Current Report on Form 8-K and incorporated herein by this reference.

### Item 3.02 Unregistered Sales of Equity Securities.

The disclosure set forth above in Item 1.01 of this Current Report on Form 8-K in the sections titled "Transaction Consideration" and "PIPE Financing" is incorporated into this Item 3.02 by reference. The issuance of the Merger Consideration and the offer, sale and issuance of the Securities have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), in reliance upon the exemption from registration provided by Section 4(a)(2) of the Securities Act.

### Item 7.01 Regulation FD Disclosure.

On April 30, 2026, the Acquiror issued a press release announcing the Merger and the PIPE Financing. The press release is attached hereto as Exhibit 99.1 and incorporated into this Item 7.01 by reference.

Attached hereto as Exhibit 99.2 and incorporated into this Item 7.01 by reference is a form of presentation (the "Investor Presentation") used by the Acquiror and the Company in presentations related to the PIPE Financing.

The information in this Item 7.01, including Exhibit 99.1 and Exhibit 99.2, shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section, unless the Acquiror specifically states that the information is to be considered "filed" under the Exchange Act or specifically incorporates it by reference into a filing under the Securities Act or the Exchange Act.

### Item 9.01 Financial Statements and Exhibits.

Exhibit No.	Description
2.1*	<a href="#">Agreement and Plan of Merger, dated April 30, 2026, by and among Shuttle Pharmaceuticals Holdings, Inc., Shuttle Merger Sub, Inc and United Dogecoin, Inc.</a>
4.1	<a href="#">Form of Common Warrant (included in Exhibit 10.1)</a>
4.2	<a href="#">Form of Pre-Funded Warrant (included in Exhibit 10.1)</a>
10.1*	<a href="#">Form of Securities Purchase Agreement, dated April 30, 2026, by and between Shuttle Pharmaceuticals Holdings, Inc. and the investors party thereto</a>
10.2	<a href="#">Placement Agency Agreement, dated April 30, 2026, by and between Shuttle Pharmaceuticals Holdings, Inc. and the investors party thereto</a>
10.3	<a href="#">Second Amendment to Asset Purchase Agreement, dated April 30, 2026, by and among Shuttle Pharmaceuticals Holdings Inc., 1563868 B.C. Ltd., 1542770 BC Ltd. and ZhiTian (Andy) Zhang.</a>
99.1	<a href="#">Press Release, dated April 30, 2026</a>
99.2	<a href="#">Investor Presentation</a>
104	Cover Page Interactive Data File (embedded within the inline XBRL document)

\* The schedules to this Exhibit have been omitted in accordance with Item 601(b)(2) of Regulation S-K. The Registrant agrees to furnish supplementally to the SEC a copy of all omitted exhibits and schedules 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.

SHUTTLE PHARMACEUTICALS HOLDINGS, INC.

Dated: May 1, 2026

By: /s/ Christopher Cooper  
Name: Christopher Cooper  
Title: Interim Chief Executive Officer

## AGREEMENT AND PLAN OF MERGER

dated as of

April 30, 2026

by and among

SHUTTLE PHARMACEUTICALS HOLDINGS, INC.,

as the Acquiror

SHUTTLE MERGER SUB, INC.,

as the Merger Sub

and

UNITED DOGECOIN INC.,

as the Company

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**Exhibit List**

Exhibit A – Form of Securities Purchase Agreement

Exhibit B – Form of Certificate of Designation

**AGREEMENT AND PLAN OF MERGER**

This Agreement and Plan of Merger (this "Agreement"), dated as of April 30, 2026, is entered into by and among Shuttle Pharmaceuticals Holdings, Inc., a Delaware corporation ("Acquiror"), Shuttle Merger Sub, Inc., a Delaware corporation ("Merger Sub"), and United Dogecoin Inc., a Delaware corporation (the "Company"). Except as otherwise indicated, capitalized terms used but not defined herein shall have the meanings set forth in Article I of this Agreement or as otherwise defined throughout this Agreement.

**RECITALS**

**WHEREAS**, the board of directors of Acquiror (the "Acquiror Board") and the board of directors of the Company (the "Company Board") have each considered that certain combination of Acquiror and the Company through a merger (the "Merger") of Merger Sub with and into the Company in accordance with the terms of this Agreement and the DGCL, as a result of which the Company will become a wholly-owned subsidiary of Acquiror (the "Surviving Corporation");

**WHEREAS**, the Acquiror Board and the Company Board have each (i) determined that the Merger is fair to, and in the best interests of, their respective corporations and stockholders, (ii) approved and declared advisable this Agreement, the Merger and the actions contemplated by this Agreement, including the authorization of a class of Series B-1 Convertible Preferred Stock, \$0.00001 par value per share, of Acquiror, as contemplated by the Certificate of Designation (as defined below) (the "Acquiror Preferred Stock"), and (iii) determined to recommend that the stockholders of their respective corporations vote to approve such matters as are contemplated by this Agreement, including, in the case of the Company, the adoption of this Agreement and, in the case of Acquiror, (A) the approval of the issuance of shares of Acquiror Preferred Stock pursuant to this Agreement and the issuance of shares of Acquiror Series B-2 Preferred Stock (as defined below) pursuant to the PIPE Offering (as defined below), in each case pursuant to Nasdaq Listing Rule 5635(d) (the "Share Issuances"), and (B) approval, to the extent required under the DGCL, of the Charter Amendment;

**WHEREAS**, for United States federal income tax purposes, (i) it is intended that the Merger shall qualify as a "reorganization" within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the "Code"), or, in the alternative, that the Merger and the PIPE Offering shall be treated as an integrated transaction that qualifies as an exchange of shares of Company Common Stock and cash for shares of Acquiror Preferred Stock within the meaning of Section 351(a) of the Code (the "Intended Tax Treatment") and (ii) to the extent the Intended Tax Treatment is determined to be a reorganization within the meaning of Section 368(a), this Agreement shall constitute a "plan of reorganization" within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3(a), and each party hereto shall be a "party to the reorganization" within the meaning of Treasury Regulations Section 1.368-2(g); and

**WHEREAS**, concurrently with the execution and delivery of this Agreement, certain investors shall have entered into a securities purchase agreement, substantially in the form attached hereto as Exhibit A (the "Securities Purchase Agreement"), representing an aggregate commitment of up to \$20,000,000, with a minimum initial closing of \$10,000,000.00 to take place no later than the date hereof, pursuant to which such investors have agreed to purchase the number of shares of Series B-2 Preferred Stock and warrants set forth therein immediately prior to the Effective Time (the "PIPE Offering").

**NOW, THEREFORE**, in consideration of the foregoing and the respective representations, warranties, covenants and agreements set forth in this Agreement, and intending to be legally bound hereby, Acquiror, Merger Sub and the Company agree as follows:

**ARTICLE I**

**CERTAIN DEFINITIONS**

Section 1.01 Definitions. As used herein, the following terms shall have the following meanings:

"Acquiror" has the meaning specified in the Preamble hereto.

"Acquiror and Merger Sub Representations" means the representations and warranties of each of Acquiror and Merger Sub expressly and specifically set forth in Article V of this Agreement, as qualified by the Acquiror Disclosure Schedules.

"Acquiror Board" has the meaning specified in the Recitals hereto.

"Acquiror Bylaws" means the bylaws, as amended, of the Acquiror.

"Acquiror Charter" means the Amended and Restated Certificate of Incorporation of the Acquiror, as amended, and any and all Certificates of Designation of the Acquiror thereunder.

"Acquiror Common Stock" means the common stock, par value \$0.00001 per share, of the Acquiror.

"Acquiror Disclosure Schedules" means the disclosure schedules of the Acquiror.

“Acquiror Material Adverse Effect” means any event, change, circumstance or development (each an “Effect”) that, individually or in the aggregate with all other Effects, that has had or would reasonably be expected to have (a) a material adverse effect on the financial condition, assets, liabilities, business, or results of operations of Acquiror and Merger Sub, taken as a whole, or (b) a prevention, material delay or material impairment in the ability of Acquiror or Merger Sub to timely consummate the Transactions; provided, however, that, solely with respect to clause (a), none of the following (or the effect of any of the following) shall be deemed to constitute, alone or in combination, or be taken into account in the determination of whether, there has been or will be an Acquiror Material Adverse Effect: (i) any change or proposed change in or change in the interpretation of any Law or GAAP; (ii) events or conditions generally affecting the industries or geographic areas in which Acquiror operates; (iii) any downturn in general economic conditions, including changes in the credit, debt, securities, financial or capital markets (including changes in interest or exchange rates, prices of any security or market index or commodity or any disruption of such markets); (iv) any geopolitical conditions, outbreak of hostilities, acts of war, sabotage, embargo, civil unrest, cyberterrorism, terrorism, military actions, earthquakes, volcanic activity, hurricanes, tsunamis, tomadoes, floods, mudslides, wild fires or other natural disasters, weather conditions, epidemics, pandemics or other outbreaks of illness or public health events and other force majeure events (including any escalation or general worsening of any of the foregoing Effects); (v) any actions taken or not taken by Acquiror as required by this Agreement; (vi) any Effect attributable to the announcement or execution, pendency, negotiation or consummation of the Merger or any of the other Transactions; or (vii) any actions taken, or failures to take action, or such other changes or events, in each case, which the Company has requested or to which it has consented or which actions are contemplated by this Agreement; except in the cases of clauses (i) through (iii), to the extent that Acquiror is disproportionately affected thereby as compared with other participants in the industry in which Acquiror operates.

“Acquiror Organizational Documents” means the Acquiror Charter and Acquiror Bylaws.

“Acquiror Preferred Stock” has the meaning specified in the Recitals hereto.

“Acquiror SEC Reports” has the meaning specified in Section 5.08(a).

“Acquiror Stockholder” means a holder of any Acquiror Common Stock.

“Acquiror Stockholder Meeting” means the annual or special meeting of the Acquiror Stockholders, including any adjournment or postponement thereof, for the purpose of, among other things, considering and, if thought fit, approving the issuance of Acquiror Common Stock underlying Acquiror Preferred Stock and warrants issuable hereunder or pursuant to the PIPE Offering.

“Action” means any claim, action, suit, charge, complaint, assessment, audit, investigation, examination, arbitration, inquiry, dispute, litigation, or proceeding, in each case that is by or before any Governmental Authority.

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“Affiliate” means, with respect to any specified Person, any Person that, directly or indirectly, controls, is controlled by, or is under common control with, such specified Person, the ownership of voting securities, its capacity as a manager, sole or managing member or otherwise, through one or more intermediaries, where “control” means possession, directly or indirectly, of the power to direct the management and policies of such specified Person.

“Agreement” has the meaning specified in the Preamble hereto.

“Antitrust Law” means (a) the HSR Act, the Federal Trade Commission Act, the Sherman Antitrust Act of 1890, the Clayton Antitrust Act, in each case, including the rules and regulations promulgated thereunder, (b) any applicable foreign antitrust Laws and (c) all other applicable Laws that are designed or intended to prohibit, restrict or regulate actions having the purpose or effect of monopolization or restraint of trade or lessening of competition through merger or acquisition.

“Balance Sheet Date” means December 31, 2025.

“Benefit Plan” means any benefit or compensation plan, program, policy, practice, agreement, Contract, arrangement or other obligation, whether or not in writing and whether or not funded, including, but not limited to, “employee benefit plans” within the meaning of Section 3(3) of ERISA (whether or not subject to ERISA), “voluntary employees’ beneficiary associations,” under Section 501(c)(9) of the Code, employment, consulting, retirement, severance, termination pay, change in control, transaction or retention arrangements, deferred compensation, equity or equity-based compensation, incentive compensation, bonus, supplemental retirement, profit sharing, health, medical, welfare, vacation, paid time off, post-termination or retiree health or welfare, cafeteria, fringe or other benefits or remuneration plan, program, policy, practice, agreement, Contract or arrangement or other obligation. The term “Benefit Plan” shall include any plan, program or arrangement provided through a staffing company, temporary employee agency, professional employer organization, or similar company or service provider that provides services or acts as co-employer, including any multiple employer plan.

“Beneficial Ownership Limitation” has the meaning specified in Section 3.07(c).

“Business Day” means a day other than a Saturday, Sunday or other day on which commercial banks in New York, New York are authorized or required by Law to close.

“CBA” has the meaning set forth in Section 4.11(a)(xiv).

“Certificate of Designation” means the Certificate of Designation of the Acquiror for the Acquiror Preferred Stock, substantially in the form attached hereto as Exhibit B.

“Certificate of Merger” has the meaning specified in Section 2.01.

“Charter Amendment” means an amendment to the Acquiror Charter to effect the Reverse Stock Split.

“Closing” has the meaning specified in Section 2.03.

“Closing Date” has the meaning specified in Section 2.03.

“Code” has the meaning specified in the Recitals hereto.

“Company” has the meaning specified in the Preamble hereto.

“Company Benefit Plan” means any Benefit Plan which is or has been sponsored or maintained by, contributed to or required to be contributed to by, or with respect to or under which any current or potential liability or obligation is borne by, the Company or its current or former ERISA Affiliates.

“Company Board” has the meaning specified in the Recitals hereto.

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“Company Common Stock” means the “Common Stock” of the Company.

“Company Disclosure Schedules” means the disclosure schedules of the Company.

“Company Intellectual Property” means all Owned Intellectual Property and all other Intellectual Property used in or necessary for the business of the Company, as currently conducted.

“Company Material Adverse Effect” means any Effect that, individually or in the aggregate with one or more other Effects, (a) is or would be reasonably expected to be materially adverse to the business, financial condition or results of operations of the Company or (b) the ability of the Company to consummate the Transactions; provided, however that none of the following shall be deemed to constitute, alone or in combination, or be taken into account in the determination of whether, there has been or will be a Company Material Adverse Effect: (i) any change in or change in the interpretation of any applicable Laws or GAAP, (ii) any events or conditions generally affecting any industry or geographic area in which the Company operates, (iii) any downturn in general economic conditions, including changes in the credit, debt, securities, financial or capital markets (including changes in interest or exchange rates, prices of any security or market index or commodity or any disruption of such markets); (iv) any geopolitical conditions, outbreak of hostilities, acts of war, sabotage, embargo, civil unrest, cyberterrorism, terrorism, military actions, earthquakes, volcanic activity, hurricanes, tsunamis, tomadoes, floods, mudslides, wild fires or other natural disasters, weather conditions, epidemics, pandemics or other outbreaks of illness or public health events and other force majeure events (including any escalation or general worsening of any of the foregoing Effects); (v) any actions taken or not taken by any Company as required by this Agreement, (vi) any Effect attributable to the announcement or execution, pendency or consummation of the Merger or the performance of this Agreement (including the impact thereof on relationships with customers, suppliers, licensors, distributors, partners, providers and employees); (vii) any failure to meet any projections, forecasts or budgets; provided that this clause (vii) shall not prevent a determination that any Effect underlying such failure has resulted in a Company Material Adverse Effect, or (viii) any actions taken, or failures to take action, or such other changes or events, in each case, which Acquiror has consented to in writing prior to the taking of, or failure to take, such action, except in the cases of clauses (i) through (iv) to the extent the Company is as a whole materially disproportionately affected thereby as compared with other participants in the industry in which the Company operates.

“Company Option” means an option to purchase shares of Company Common Stock.

“Company Organizational Documents” means the Existing Company Charter and the Existing Company Bylaws.

“Company Permits” has the meaning specified in Section 4.06(c).

“Company Representations” means the representations and warranties of the Company expressly and specifically set forth in Article IV of this Agreement, as qualified by the Company Disclosure Schedules. For the avoidance of doubt, the Company Representations are solely made by the Company.

“Company Software” means all Software with respect to which all Intellectual Property embodied thereby are owned or purported to be owned by the Company.

“Company Stockholder” means, as of any particular time, the holder of Existing Company Stock.

“Company Stockholder Approval” has the meaning specified Section 6.01(b).

“Confidential Information” means any proprietary or confidential information concerning the Company, Acquiror or the business and affairs of either party or information not already generally available to the public.

“Contracts” means any legally binding contracts, agreements, subcontracts, licenses, leases, and purchase orders.

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“Conversion Effective Time” means the time the Acquiror receives all requisite approval (including shareholder approval and Nasdaq approval, as applicable) to enable the holders of Acquiror Preferred Stock to convert the Acquiror Preferred Stock into Acquiror Common Stock in accordance with its terms.

“DGCL” means the General Corporation Law of the State of Delaware, as amended from time to time.

“Digital Asset” means any digital or virtual currency, cryptocurrency, token, coin, or other cryptographically secured digital representation of value or rights that is capable of being transferred, stored, or traded electronically, including bitcoin and any other digital assets that may be earned, mined, acquired, or held by the Company from time to time.

“Effect” has the meaning specified in the definition of “Acquiror Material Adverse Effect.”

“Effective Time” has the meaning specified in Section 2.01.

“Enforceability Exceptions” has the meaning specified in Section 4.02(a).

“Environmental Laws” means all Laws relating to pollution or protection of the environment (including natural resources), health and safety (to the extent relating to management of or exposure to Hazardous Materials), or the use, generation, storage, emission, transportation, disposal or release of or exposure to Hazardous Materials.

“Equity Securities” means any share, share capital, capital stock, partnership, membership, joint venture or similar interest in any Person (including any stock appreciation right, phantom stock, restricted stock unit, performance stock unit, restricted stock, profit participation or similar rights) and any option, warrant, right or security (including debt securities) convertible, exchangeable or exercisable therefor.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended.

“ERISA Affiliate” means, with respect to the Company, any other Person that is or has been treated as a single employer with the Company as described Section 414(b), (c), (m) or (o) of the Code or Section 4001(b)(1) of ERISA, in each case whether or not engaged in a trade or business.

“Exchange Act” means the Securities Exchange Act of 1934, as amended.

“Existing Company Bylaws” means the bylaws of the Company prior to the Effective Time.

“Existing Company Charter” means the certificate of incorporation of the Company prior to the Effective Time.

“Existing Company Common Stock” means the “Common Stock” of the Company (as defined in the Existing Company Charter).

“Existing Company Preferred Stock” means the “Preferred Stock” of the Company (as defined in the Existing Company Charter).

“Existing Company Stock” means the Existing Company Common Stock and the Existing Company Preferred Stock.

“Financial Derivative/Hedging Arrangement” means any transaction (including an agreement with respect thereto) which is a rate swap transaction, basis swap, forward rate transaction, commodity swap, commodity option, equity or equity index swap, equity or equity index option, bond option, interest rate option, foreign exchange transaction, cap transaction, floor transaction, collar transaction, currency swap transaction, cross-currency rate swap transaction, currency option or any combination of these transactions.

“Financial Statements” has the meaning specified in Section 4.05(a).

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“Form 8-K” has the meaning set forth in Section 8.04(b).

“GAAP” means generally accepted accounting principles in the United States set forth in the opinions and pronouncements of the Financial Accounting Standards Board or such other principles as may be approved by a significant segment of the accounting profession in the United States, that are applicable to the circumstances as of the date of determination, consistently applied.

“Governmental Authority” means any U.S. or foreign federal, state, provincial, municipal, local or foreign government, governmental authority, regulatory or administrative agency, governmental commission, department, board, bureau, agency or instrumentality, arbitrator or arbitral body (public or private), court, tribunal any state-owned or controlled enterprise.

“Governmental Order” means any order, judgment, injunction, decree, writ, stipulation, determination or award, in each case, entered by or with any Governmental Authority.

“Hazardous Material” means any material, substance or waste that is listed, regulated, or defined as “hazardous,” “toxic,” or “radioactive,” or as a “pollutant” or “contaminant” (or words of similar intent or meaning) under applicable Environmental Laws, including but not limited to petroleum, petroleum by-products, asbestos or asbestos-containing material, polychlorinated biphenyls, per- and polyfluoroalkyl substances, flammable or explosive substances, toxic mold or pesticides.

“Indebtedness” means, with respect to any Person, without duplication, any obligations (whether or not contingent) consisting of (a) the outstanding principal amount of and accrued and unpaid interest on, and other payment obligations for, borrowed money, or payment obligations issued or incurred in substitution or exchange for payment obligations for borrowed money, (b) amounts owing as deferred purchase price for property or services, including “earnout” payments (but excluding ordinary trade accounts payable), (c) payment obligations evidenced by any promissory note, bond, debenture, mortgage or other debt instrument or debt security, (d) contingent reimbursement obligations with respect to letters of credit, bankers’ acceptance or similar facilities (in each case to the extent drawn), (e) any obligations in the nature of accrued fees, interest, prepayment or other premiums, penalties, termination fees, expenses and other amounts incurred or that would be payable in connection with the prepayment, repayment, redemption, payoff, amendment, modification or supplement of any of the items in the foregoing clauses, (f) payment obligations of a third party secured by (or for which the holder of such payment obligations has an existing right, contingent or otherwise, to be secured by) any Lien, other than a Permitted Lien, on assets or properties of such Person, whether or not the obligations secured thereby have been assumed, (g) obligations under capitalized leases, (h) obligations net of benefits under all Financial Derivative/Hedging Arrangements, (i) any underfunded pension liability, unfunded deferred compensation plan obligations, and post-retirement health or welfare benefits, (j) any unpaid dividends or distributions declared or payable to any Company Stockholder, (k) any other indebtedness or obligation reflected or required to be reflected as indebtedness in a consolidated balance sheet, in accordance with GAAP, (l) guarantees, make-whole agreements, hold harmless agreements or other similar arrangements with respect to any amounts of a type described in the foregoing clauses, and (m) with respect to each of the foregoing, any unpaid interest, breakage costs, prepayment or redemption penalties or premiums, or other unpaid fees or obligations (including unreimbursed expenses or indemnification obligations for which a claim has been made); provided, however, that Indebtedness shall not include Taxes or accounts payable to trade creditors in the ordinary course of business that are not past due and accrued expenses arising in the ordinary course of business consistent with past practice.

“Insurance Policies” has the meaning specified in Section 4.20(a).

“Intellectual Property” means all intellectual property rights, as they exist anywhere in the world, whether registered or unregistered, including all: (a) patents and patent applications (including any divisions, continuations, continuations-in-part, reissues, reexaminations and interferences thereof); (b) trademarks, service marks, trade dress, trade names, brand names, logos and corporate names; (c) copyrights, mask works and designs; (d) internet domain names; (e) trade secrets and other intellectual property rights in know-how, technology, inventions (whether patentable or not), processes, procedures, database rights, confidential business information and other proprietary information and rights; and (f) intellectual property rights in Software.

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“Intended Tax Treatment” has the meaning specified in Section 8.03(b).

“Interim Period” has the meaning specific in Section 7.01.

“IT Systems” means all computer hardware (including hardware, firmware, peripherals, communication equipment and links, storage media, networking equipment, power supplies and any other components used in conjunction with such), data processing systems, Software, and all other information technology equipment owned or controlled by, as applicable, the Company and/or used in the operation of the Company business or the Acquiror and/or used in the operation of the Acquiror business.

“Knowledge” shall mean the actual knowledge of (a) in the case of the Company, each of Ryan Trasolini and Padraig Power and (b) in the case of Acquiror, each of Christopher Cooper and Yuying Liang.

“Law” means any statute, law (including common law), act, constitution, treaty, code, ordinance, rule, ruling, regulation or Governmental Order, in each case, of any Governmental Authority. All references to “Laws” shall be deemed to include any amendments thereto, and any successor Law, unless the context otherwise requires.

“Lease Documents” has the meaning specified in [Section 4.18\(c\)](#).

“Leased Company Properties” has the meaning specified in [Section 4.18\(b\)](#).

“Legacy Business” has the meaning specified in [Section 7.06\(a\)](#).

“Legacy Sub” has the meaning specified in [Section 7.06\(a\)](#).

“Lien” means any mortgage, deed of trust, pledge, hypothecation, easement, right of way, purchase option, right of first refusal, covenant, restriction, security interest, license, title defect, encroachment or other survey defect, or other lien or encumbrance of any kind, except for (a) any restrictions arising under any applicable Securities Laws, and (b) immaterial easements, rights of way, covenants, encumbrances or restrictions that do not materially detract the value of the underlying asset or the use of the asset.

“Material Contracts” has the meaning specified in [Section 4.11\(a\)](#).

“Material Customer” has the meaning specified in [Section 4.23\(a\)](#).

“Material Vendor” has the meaning specified in [Section 4.23\(b\)](#).

“Merger” has the meaning specified in the Recitals hereto.

“Merger Consideration” means the shares of Acquiror Preferred Stock issued pursuant to [Section 3.01](#).

“Merger Sub” has the meaning specified in the Preamble hereto.

“Milestone Event” has the meaning set forth in [Section 3.07\(b\)](#).

“Milestone Event Notice” has the meaning set forth in [Section 3.07\(c\)](#).

“Milestone Issuance” has the meaning set forth in [Section 3.07\(a\)](#).

“Milestone Overage Number” has the meaning set forth in [Section 3.07\(c\)](#).

“Milestone Securities” has the meaning set forth in [Section 3.07\(a\)](#).

“Milestone Shares” means the shares of Acquiror Common Stock issuable to each Company Stockholder pursuant to [Section 3.07\(a\)](#).

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“Minimum Uptime” has the meaning set forth in [Section 3.07\(b\)](#).

“Mining Rigs” has the meaning set forth in [Section 3.07\(b\)](#).

“Molecule Sub” means 1563868 B.C. Ltd., a British Columbia limited company

“Nasdaq” means the Nasdaq Capital Market tier of The Nasdaq Stock Market LLC.

“Open Source Software” means software that is distributed as “free software” (as defined by the Free Software Foundation), “open source software” (meaning software distributed under any license approved by the Open Source Initiative as set forth at [www.opensource.org](http://www.opensource.org)) or under a similar licensing or distribution model (including under a GNU General Public License (GPL), a GNU Lesser General Public License (LGPL), a Mozilla Public License (MPL), a BSD license, an Artistic License, a Netscape Public License, a Sun Community Source License (SCSL), a Sun Industry Standards License (SISL), and/or an Apache License).

“Owned Intellectual Property” means all Intellectual Property owned or purported to be owned by the Company.

“Permitted Liens” means (a) statutory or common law Liens of mechanics, materialmen, warehousemen, landlords, carriers, repairmen, construction contractors and other similar Liens that arise in the ordinary course of business, and (i) relate to amounts not yet delinquent or (ii) that are being contested in good faith through appropriate Actions and for which appropriate reserves for the amount being contested have been established in accordance with GAAP on the Financial Statements, (b) Liens arising under original purchase price conditional sales contracts and equipment leases with third parties entered into in the ordinary course of business, (c) Liens for Taxes not yet due and payable or which are being contested in good faith through appropriate Actions, and for which appropriate reserves have been established in accordance with GAAP on the Financial Statements, (d) non-monetary Liens, encumbrances and restrictions on real property (including easements, covenants, rights of way and similar restrictions) of record affecting title to real property that do not, individually or in the aggregate, materially interfere with the occupancy or present uses of such real property, (e) non-exclusive licenses of Intellectual Property, (f) requirements and restrictions of zoning, building and other applicable Laws and municipal by-laws, and development, site plan, subdivision or other agreements with municipalities, which do not materially interfere with the current use or occupancy of any Leased Company Properties, and (g) Liens that do not, individually or in the aggregate, materially and adversely affect, or materially disrupt, the ordinary course operation of the businesses of the Company, taken as a whole.

“Person” means any individual, firm, corporation, partnership, limited liability company, incorporated or unincorporated association, joint venture, joint stock company, Governmental Authority or other entity of any kind.

“Personal Information” means any personal information that specifically identifies any individual who has provided information to the Company, including names, addresses, telephone numbers, personal health information, drivers’ license numbers and government-issued identification numbers, as applicable.

“PIPE Offering” has the meaning specified in the Recitals hereto.

“Pre-Funded Warrants” means pre-funded common stock purchase warrants, which shall be exercisable immediately and shall expire when exercised in full, substantially in the form contemplated by the PIPE Offering.

“Premium Cap” has the meaning specified in [Section 7.02](#).

“Press Release” has the meaning set forth in [Section 8.04\(b\)](#).

“Privacy Laws” means any and all Laws applicable to the Company relating to the collection, use, disclosure, transfer, storage, safeguarding and security (both technical and physical) of Personal Information, including, as applicable, the European Union General Data Protection Regulation (“GDPR”) (EU 2016/679).

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“Products” mean any products or services, developed, manufactured, performed, out-licensed, sold, distributed or otherwise made available by or on behalf of the Company, from which the Company has derived previously, is currently deriving, or is scheduled to derive revenue from the sale or provision thereof.

“Proxy Statement” has the meaning specified in [Section 8.02\(d\)](#).

“Public Official” means (a) any director, manager, officer, employee or representative of any Governmental Authority; (b) any director, manager, officer, employee or representative of any commercial enterprise that is owned or controlled by a Governmental Authority; (c) any director, manager, officer, employee or representative of any public international organization; (d) any Person acting in an official capacity for or on behalf of any Governmental Authority; and (e) any political party, party official or candidate for political office.

“Registered IP” has the meaning specified in [Section 4.15\(a\)](#).

“Representative” means, as to any Person, any of the officers, directors, managers, employees, counsel, accountants, disclosed financial advisors, disclosed lenders, disclosed debt financing sources and consultants of such Person.

“Required Acquiror Stockholder Proposal” has the meaning specified in [Section 4.05\(d\)](#).

“Reverse Stock Split” means a reverse stock split of the Acquiror Common Stock at a ratio of 1-for-4.

“SEC” means the United States Securities and Exchange Commission.

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

“Securities Laws” means the securities laws of any state, U.S. federal or foreign jurisdiction and the rules and regulations promulgated thereunder.

“Securities Purchase Agreement” has the meaning specified in the Recitals hereto

“Series B-2 Preferred Stock” means the newly authorized and designated class of Series B-2 Convertible Preferred Stock, \$0.000001 par value per share, of the Acquiror, to be issued in the PIPE Offering.

“Software” means any and all (a) computer programs, including any and all software implementation of algorithms, models and methodologies, whether in source code, object code, human readable form or other form, (b) databases and compilations, including any and all data and collections of data, whether machine readable or otherwise, (c) descriptions, flow charts and other work products used to design, plan, organize and develop any of the foregoing, screens, user interfaces, report formats, firmware, development tools, templates, menus, buttons and icons and (d) all documentation including user manuals and other training documentation relating to any of the foregoing.

“Subsidiary” means, with respect to a Person, any corporation or other organization (including a limited liability company or a partnership), whether incorporated or unincorporated, of which such Person directly or indirectly owns or controls a majority of the Equity Securities.

“Survival Period” has the meaning specified in Section 10.01.

“Surviving Corporation” has the meaning specified in the Recitals.

“Surviving Representations” means, all of the representations and warranties set forth in Article IV and Article V.

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“Tax” means any federal, state, provincial, territorial, local, foreign and other net income, alternative or add-on minimum, franchise, gross income, adjusted gross income or gross receipts, employment, environmental, unemployment, compensation, utility, social security (or similar), withholding, payroll, ad valorem, transfer, windfall profits, license, branch, excise, severance, production, stamp, occupation, premium, personal property, real property, capital stock, profits, disability, registration, value added, capital gains, goods and services, estimated, sales, use, unclaimed property or escheat obligation, or other tax, governmental fee, duty, charge, impost, or assessment of any kind whatever in the nature of a tax, whether disputed or not, together with any interest, deficiency, penalty, addition to tax or additional amount imposed with respect thereto by a Governmental Authority.

“Tax Authority” means any Governmental Authority with jurisdiction or authority to impose, administer, levy, assess or collect Tax.

“Tax Return” means any return, report, statement, refund, claim, election, disclosure, declaration, information report or return, estimate or other document filed or required to be filed with a Tax Authority with respect to Taxes, including any schedule or attachment thereto and including any amendments thereof.

“Trading Market” means any market or exchange on which the Acquiror Common Stock is listed or quoted for trading on the date in question (including, without limitation, the NYSE MKT, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange, or the OTC Bulletin Board or OTCQB Marketplace operated by OTC Markets Group, Inc. (or any successors to any of the foregoing).

“Transaction Expenses” means any fees, costs and expenses incurred or subject to reimbursement by the Company, Acquiror or Merger Sub, whether accrued for or not, in each case in connection with the Transactions contemplated by this Agreement, including (a) any brokerage fees, commissions, finders’ fees, or financial advisory fees, and, in each case, related costs and expenses, (b) any fees, costs and expenses of counsel, accountants or other advisors or service providers, and (c) with respect to Acquiror and Merger Sub, any fees, costs and expenses or payments related to any transaction bonus, discretionary bonus, change-of-control payment, retention or other compensatory payments made to any employee of the Acquiror or Merger Sub solely as a result or related to (and measured assuming the satisfaction of any other related contingencies such as termination or the passage of time) of the execution of this Agreement or the consummation of the transactions contemplated hereby and thereby (including the employer portion of any payroll, social security, unemployment or similar Taxes imposed with respect thereto). For the avoidance of doubt, no bonus, change-of-control payment, retention or other compensatory payment paid to any manager, officer or employee of the Company shall be a Transaction Expense.

“Transactions” means the transactions contemplated by this Agreement, including the Merger.

“Transfer Taxes” has the meaning specified in Section 8.03(a).

“Treasury Regulations” means the U.S. Treasury Department regulations promulgated under the Code.

#### Section 1.02 Construction.

(a) Unless the context of this Agreement otherwise requires, (i) words of any gender include each other gender, (ii) words using the singular or plural number also include the plural or singular number, respectively, (iii) the terms “hereof,” “herein,” “hereby,” “hereto” and derivative or similar words refer to this entire Agreement, (iv) the terms “Article,” “Section,” “Schedule,” “Exhibit” and “Annex” refer to the specified Article, Section, Schedule, Exhibit or Annex of or to this Agreement unless otherwise specified, (v) the word “including” shall mean “including without limitation,” (vi) the word “or” shall be disjunctive but not exclusive and (vii) any reference to a Law shall mean such Law as amended.

(b) Unless the context of this Agreement otherwise requires, references to agreements and other documents shall be deemed to include all subsequent amendments, waivers and other modifications thereto.

(c) Unless the context of this Agreement otherwise requires, references to statutes shall include all regulations promulgated thereunder and references to statutes or regulations shall be construed as including all statutory and regulatory provisions consolidating, amending or replacing the statute or regulation.

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(d) The language used in this Agreement shall be deemed to be the language chosen by the parties to express their mutual intent and no rule of strict construction shall be applied against any party.

(e) Whenever this Agreement refers to a number of days, such number shall refer to calendar days unless Business Days are specified. If any action is to be taken or given on or by a particular calendar day, and such calendar day is not a Business Day, then such action may be deferred until the next Business Day.

(f) All accounting terms used herein and not expressly defined herein shall have the meanings given to them under GAAP.

(g) The phrases “delivered,” “provided to,” “furnished to,” “made available” and phrases of similar import when used herein, unless the context otherwise requires, means that a copy of the information or material referred to has been provided no later than two (2) Business Days prior to the date of this Agreement to the party to which such information or material is to be provided or furnished (i) in the virtual “data room” set up by the Company in connection with this Agreement or (ii) by delivery to such party or its legal counsel via electronic mail or hard copy form.

## ARTICLE II

### THE MERGER; CLOSING

Section 2.01 The Merger. Upon the terms and subject to the conditions set forth in this Agreement, at the Effective Time, Merger Sub shall be merged with and into the Company, with the Company being the Surviving Corporation following the Merger and shall continue its corporate existence under the laws of Delaware as a wholly owned subsidiary of Acquiror, and the separate existence of Merger Sub shall cease. The Merger shall be consummated in accordance with this Agreement and the DGCL and evidenced by a certificate of merger (the “Certificate of Merger”), such Merger to be consummated and effective upon the filing of the Certificate of Merger with the Secretary of State of the State of Delaware or at such later time as may be agreed by Acquiror and the Company in writing and specified in the Certificate of Merger (the “Effective Time”).

Section 2.02 Effects of the Merger. The Merger shall have the effects set forth in this Agreement and the DGCL. Without limiting the generality of the foregoing and subject thereto, by virtue of the Merger and without further act or deed, at the Effective Time, all of the property, rights, privileges, powers and franchises of the Company and Merger Sub shall vest in the Surviving Corporation and all of the debts, liabilities and duties of the Company and Merger Sub shall become the debts, liabilities and duties of the Surviving Corporation.

Section 2.03 Closing. Subject to the satisfaction or (to the extent permitted by Law) waiver of the conditions set forth in Article IX, the closing of the Merger (the “Closing”) will take place at 10:00 a.m., Eastern time (or at such other time as Acquiror and the Company mutually agree upon, orally or in writing), on a date to be specified by Acquiror and the Company (the “Closing Date”), which shall be no later than the second (2nd) Business Day after satisfaction or (to the extent permitted by Law) waiver of the conditions set forth in Article IX (other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or (to the extent permitted by Law) waiver of such conditions by remote exchange of electronic documents, unless another date or time is agreed to in writing by Acquiror and the Company).

#### Section 2.04 Organizational Documents of the Company and Acquiror.

(a) At the Effective Time, the Existing Company Charter, as in effect immediately prior to the Effective Time, shall be the certificate of incorporation of the Surviving Corporation, until thereafter supplemented or amended as provided therein and in accordance with the DGCL (subject to Section 7.02).

(b) At the Effective Time, the Existing Company Bylaws, as in effect immediately prior to the Effective Time, shall continue to be the bylaws of the Surviving Corporation, until thereafter supplemented or amended in accordance with its terms and the DGCL.

(c) The Acquiror Charter, as in effect immediately prior to the Effective Time, shall be the certificate of incorporation of the Acquiror, until thereafter supplemented or amended in accordance with its terms and the DGCL.

(d) The Acquiror Bylaws, as in effect immediately prior to the Effective Time, shall be the bylaws of the Acquiror, until thereafter supplemented or amended in accordance with its terms and the DGCL.

#### Section 2.05 Directors and Officers of Acquiror and the Company.

(a) Persons constituting the officers of the Company prior to the Effective Time shall continue to be the officers of the Surviving Corporation, in their respective capacities, until the earlier of their death, resignation or removal or until their respective successors are duly appointed.

(b) Persons constituting the directors of the Company prior to the Effective Time shall continue to be the directors of the Surviving Corporation, in their respective capacities, until the earlier of their death, resignation or removal or until their respective successors are duly appointed, it being agreed to by the Acquiror that it shall not, as the sole stockholder of the Surviving Corporation, vote or consent in any way to the removal or replacement of any such Persons without their prior written consent. During the Interim Period, such Persons shall have sole and complete authority and control over the business and affairs of the Surviving Corporation, including but not limited to (a) to manage and direct all operations of the Surviving Corporation, (b) control and access to all bank accounts and other financial accounts of the Surviving Corporation, (c) the authority to approve or disapprove all expenditures, obligations, and other commitments of funds, (d) authorize any hiring, termination, or compensation decisions with respect to personnel, and (e) approve the receipt, use, and disbursement of any and all funds or other assets of the Surviving Corporation.

(c) Acquiror shall take such actions as may be reasonably necessary prior to the Effective Time such that (i) Ryan Trasolini and Christopher Cooper shall be appointed to serve as the co-CEO of the Acquiror, effective as of the Effective Time, and (ii) all other officers of the Acquiror prior to the Effective Time shall, as of the Effective Time, continue as the officers of Acquiror in identical positions until the earlier of their death, resignation or removal or until their respective successors are duly appointed.

### ARTICLE III

#### EFFECT ON SECURITIES

Section 3.01 Effect on Securities. At the Effective Time, by virtue of the Merger and without any action on the part of the Company, Acquiror, Merger Sub or the holder of any Existing Company Stock:

(a) Conversion of Merger Sub Common Stock. Each share of common stock, \$0.00001 par value per share, of Merger Sub, issued and outstanding immediately prior to the Effective Time shall be converted into one (1) validly issued, fully paid and nonassessable share of Company Common Stock.

(b) Consideration for All Other Company Capital Stock. At the Effective Time, (i) each share of Existing Company Stock issued and outstanding immediately prior to the Effective Time shall be canceled and converted into the right to receive a portion of the Merger Consideration, consisting of shares of Acquiror Preferred Stock, as set forth in this Section 3.01(b); and (ii) each holder of such shares shall receive, for each share of Existing Company Common Stock held immediately prior to the Effective Time, a pro rata portion of the Merger Consideration, allocated as follows: a number of duly authorized, validly issued, fully paid and nonassessable shares of Acquiror Preferred Stock, such that, immediately following the Effective Time, the holders of Existing Company Common Stock collectively hold, on an as-converted to Acquiror Common Stock basis and without taking into account any shares of Acquiror Preferred Stock issued or issuable pursuant to the PIPE Offering, 75.65% of the total issued and outstanding equity securities of the Acquiror (calculated on an as converted, fully diluted basis). The shares of Acquiror Preferred Stock issued to holders of Existing Company Common Stock pursuant to this Section 3.01(b), on an as-converted and fully diluted basis, shall collectively represent (i) 50.4% of the equity capital of the Acquiror as of the Closing, and (ii) 68.85% of the equity capital of the Acquiror assuming all of the Milestone Shares have been issued, in each case on an converted, fully diluted basis, taking into account the maximum number of shares of Acquiror Preferred Stock and warrants issued or issuable pursuant to the PIPE Offering. For purposes of this Agreement, the shares of Acquiror Preferred Stock issued pursuant to this Section 3.01 are sometimes referred to as the “Merger Consideration.”

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(c) Cancellation of Treasury Stock. All shares of Existing Company Common Stock that are held in treasury immediately prior to the Effective Time shall be cancelled and shall cease to exist and no stock of Acquiror Preferred Stock or other consideration shall be delivered in exchange therefor.

(d) Company Options. Each Company Option that is outstanding and unexercised as of immediately prior to the Effective Time will be subject to Section 8.7.

Section 3.02 Withholding. Acquiror and the Surviving Corporation and their respective Affiliates and agents shall be entitled to deduct and withhold from any amounts otherwise deliverable or payable under this Agreement such amounts that any such Persons are required to deduct and withhold with respect to any of the deliveries and payments contemplated by this Agreement under the Code or any other applicable Law. To the extent that Acquiror, the Surviving Corporation or their respective Affiliates withholds or deducts such amounts with respect to any Person and properly remits such withheld or deducted amounts to the applicable Governmental Authority, such withheld or deducted amounts shall be treated as having been paid to or on behalf of such Person in respect of which such withholding or deduction was made for all purposes. In the case of any such payment payable to employees of the Company or its Affiliates in connection with the Merger that is properly treated as compensation, the parties shall cooperate to pay such amounts through the Company's or an Affiliate's payroll to facilitate applicable withholding.

Section 3.03 No Fractional Shares. Notwithstanding anything to the contrary contained herein, no certificates or scrip representing fractional shares of Acquiror Common Stock shall be issued upon the exchange for Existing Company Common Stock pursuant to Section 3.01, and such fractional share interests shall not entitle the owner thereof to vote or to any other rights of a holder of Acquiror Common Stock. Any fractional share that would otherwise be issued shall be rounded down to the nearest whole share.

Section 3.04 Reverse Stock Split. As soon as practicable after the Closing, the Acquiror shall cause the Charter Amendment to be filed with the Secretary of State of the State of Delaware to implement the Reverse Stock Split, and the Reverse Stock Split shall be effective. Notwithstanding the foregoing, the Acquiror and the Company, in writing, may determine to forego, waive and not effect the Reverse Stock Split, if after the Effective Date the Acquiror remains in compliance with applicable Nasdaq listing standards.

Section 3.05 Equitable Adjustments. In the event of any stock split, reverse stock split, stock dividend (including any dividend or distribution of securities convertible into capital stock), reorganization, reclassification, combination, recapitalization or other like change with respect to the Existing Company Common Stock, Acquiror Common Stock or Acquiror Preferred Stock occurring after the date hereof and prior to the Effective Time, all references herein to specified numbers of shares of any class or series affected thereby, and all calculations provided for that are based upon numbers of shares of any class or series (or prices therefor) affected thereby, shall be equitably adjusted to the extent necessary to provide the parties the same economic effect as contemplated by this Agreement prior to such stock split, reverse stock split (including the Reverse Stock Split), stock dividend, reorganization, reclassification, combination, capitalization or other like change. Nothing in this Section 3.05 shall be construed to permit the Company or Acquiror to take any action with respect to its securities that is prohibited by the terms of this Agreement.

Section 3.06 No Further Ownership Rights in Company Common Stock. All shares of Acquiror Preferred Stock issued in accordance with the terms hereof shall be deemed to have been issued in full satisfaction of all rights pertaining to such shares of Company Common Stock, and from and after the Effective Time there shall be no further registration of transfers on the stock transfer books of the Surviving Corporation of the shares of Existing Company Common Stock that were outstanding immediately prior to the Effective Time.

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#### Section 3.07 Milestone Issuances.

(a) Following the Closing, subject to the satisfaction (or waiver) of the conditions set forth herein, the Acquiror shall issue and deliver to the Company Stockholders immediately prior to the Effective Time, for no additional consideration, up to three equal installments of 6,510,219 shares of Acquiror Common Stock in the aggregate (for a total of up to 19,530,657 Milestone Shares in the aggregate if all three Milestone Events are achieved), or, as applicable, Pre-Funded Warrants in lieu thereof in accordance with this Section 3.07. The Acquiror Common Stock and Pre-Funded Warrants, if any, to be issued in the connection with any Milestone Event are collectively referred to herein as the “Milestone Securities”, and each such issuance of Milestone Securities in respect of a Milestone Event is referred to herein as a “Milestone Issuance”. The Acquiror Common Stock issuable either directly in connection with a Milestone Event or upon the exercise of any Pre-Funded Warrants, if any, is referred to herein as the “Milestone Shares”.

(b) Each of the following clauses (i), (ii) and (iii) is a “Milestone Event” for purposes of this Section 3.07. For the avoidance of doubt, each Milestone Event may only be achieved once and shall entitle such Company Stockholders to only one Milestone Issuance in respect thereof, regardless of how many times the conditions described therein may be satisfied: (i) the date upon which the Surviving Corporation or a Subsidiary thereof purchased or purchases an aggregate of 2,000 dogecoin mining rigs (“Mining Rigs”); (ii) the date upon which the Surviving Corporation or a subsidiary thereof achieves a minimum 90% fleet operational uptime (the “Minimum Uptime”) and maintains the Minimum Uptime for any seven (7) consecutive day period, excluding scheduled maintenance windows for servicing and force majeure events, and provided that such date is on or prior to the sixty (60) calendar day anniversary of the commencement of operational uptime of the Mining Rigs; and (iii) the date upon which the Surviving Corporation or a subsidiary thereof executes a binding colocation and hosting agreement securing electrical power and related infrastructure services at a rate not exceeding \$0.075 per kilowatt-hour, inclusive of all material operating costs.

(c) Upon the achievement of a Milestone Event, the Acquiror shall, within three (3) Business Days thereafter, provide written notice to each such Company Stockholder (the “Milestone Event Notice”) specifying (i) the Milestone Event that has occurred, (ii) the date of occurrence of such Milestone Event and (iii) such Company Stockholder's Pro Rata Portion of the Milestone Securities issuable in respect of such Milestone Event. Within three (3) Business Days following delivery of the applicable Milestone Event Notice, subject to the terms and conditions set forth herein, the Acquiror shall issue and deliver to each such Company Stockholder (or its designee) such Company Stockholder's pro rata portion of the Milestone Securities issuable in respect of such Milestone Event; provided, however, that in the event the number of shares of the Acquiror Common Stock to be issued to such a Company Stockholder (together with such Company Stockholder's Affiliates, and any Person acting as a group together with such Company Stockholder or any of such Company Stockholder's Affiliates) in connection with such Milestone Event would otherwise result in such Company Stockholder beneficially owning in excess of 4.99% (or at the Company Stockholder's election, 9.99% or 19.99%) of the outstanding Acquiror Common Stock immediately after giving effect to the issuance (the “Beneficial Ownership Limitation”), then (i) the number of shares of Acquiror Common Stock otherwise issuable to such Company Stockholder in the Milestone Issuance will be reduced by the minimum number of shares of Acquiror Common Stock (such number, the “Milestone Overage Number”) that would result in such Company Stockholder beneficially owning more than the Beneficial Ownership Limitation of the outstanding Acquiror Common Stock immediately after the Milestone Issuance, and (ii) in lieu of issuing the number of shares of Acquiror Common Stock equal to such

Purchaser's Milestone Overage Number, such Purchaser shall receive Pre-Funded Warrants exercisable for a number of shares of Acquiror Common Stock equal to its Milestone Overage Number, subject to the Beneficial Ownership Limitation.

(d) Notwithstanding anything to the contrary herein, in no event shall Milestone Securities be issued pursuant to this Section 3.07 unless and until the Acquiror obtains approval from its stockholders for the issuance thereof and upon the issuance of Acquiror Common Stock upon the conversion of the Acquiror Preferred Stock in accordance with the listing rules of the Trading Market at the Acquiror Stockholder Meeting.

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#### ARTICLE IV.

##### REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Except as set forth in the Company Disclosure Schedules to this Agreement (each of which qualifies (a) the correspondingly numbered representation, warranty or covenant if specified therein and (b) such other representations, warranties or covenants where its relevance as an exception to (or disclosure for purposes of) such other representation, warranty or covenant is reasonably apparent on its face), the Company represents and warrants to Acquiror and Merger Sub as follows:

###### Section 4.01 Organization, Standing and Corporate Power.

(a) The Company is a corporation, duly incorporated, and validly existing under the laws of the State of Delaware and has all requisite legal entity power and authority to carry on its business as now being conducted. The Company is duly qualified or licensed to do business and is in good standing in each jurisdiction in which the conduct of its business or the ownership, leasing or operation of its properties makes such qualification or licensing necessary, except as would not, individually or in the aggregate, reasonably be expected to prevent, materially delay or materially impair the ability of the Company to consummate the Transactions or have a Company Material Adverse Effect. The Company Organizational Documents, as amended to the date of this Agreement and that have been made available to the Acquiror are true, correct and complete and are in effect as of the date of the Agreement and the Company is not in material default under or in material violation of any provision thereunder.

###### Section 4.02 Corporate Authority; Approval; Non-Contravention.

(a) Including the Company Stockholder Approval, the Company has all requisite corporate or other legal entity power and authority and has taken all corporate or other legal entity action necessary in order to execute, deliver and perform its obligations under this Agreement and, subject to satisfaction of the conditions to Closing contemplated hereby, to consummate the Transactions. The execution, delivery and performance by the Company of this Agreement and the consummation by it of the Transactions, have been duly and validly authorized by all necessary corporate consent and authorizations on the part of the Company, and no other corporate actions on the part of the Company are necessary to authorize the execution and delivery by the Company of this Agreement and the consummation by it of the Transactions. This Agreement has been duly executed and delivered by the Company and, assuming due authorization, execution and delivery hereof by the other parties hereto, is a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms (subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other Laws affecting creditors' rights generally from time to time in effect and by general equitable principles (the "Enforceability Exceptions").

(b) The execution, delivery and performance of this Agreement and the consummation of the Transactions, do not, and will not, constitute or result in (i) a breach or violation of, or a default under, the Company Organizational Documents or, (ii) with or without notice, lapse of time or both, a breach or violation of, a termination (or right of termination) of or default or change of control under, the creation or acceleration of any obligations under or the creation of a Lien (other than a Permitted Lien) on any of the material assets of the Company pursuant to, any Material Contract to which any member of the Company is a party or, assuming compliance with the matters referred to in Section 4.02(a), under any Law to which the Company is subject (except Laws that are applicable due to the Company's business, or the Contracts or licenses of the Company), except as disclosed on Schedule 4.02(b) of the Company Disclosure Schedules.

###### Section 4.03 Governmental Approvals.

(a) No consent of, or registration, declaration, notice or filing with, any Governmental Authority is required by or with respect to the Company in connection with the execution and delivery by the Company of this Agreement or the consummation of the Transactions, except for such consents, registrations, declarations, notices and filings which, if not obtained or made, would not, individually or in the aggregate, reasonably be expected to be material to the Company.

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(b) The Company's contemplated digital asset mining activities, as currently planned, do not require the Company to be licensed or registered as a money transmitter, broker-dealer, commodities dealer, or investment adviser under applicable Law. The Company has not received written notice from any Governmental Authority alleging that its planned activities violate applicable Law.

###### Section 4.04 Capitalization; Subsidiaries.

(a) Set forth on Schedule 4.04(a) of the Company Disclosure Schedules is a true, correct and complete list of each holder of issued and outstanding Equity Securities (including notes and other securities convertible into Equity Securities) of the Company and the Equity Securities held by each such holder as of the date hereof. Each of the outstanding Equity Securities of the Company (1) is duly authorized, validly issued, fully paid and nonassessable, (2) was issued in compliance in all material respects with applicable Laws, and (3) was not issued in breach or violation of any preemptive rights or Contract.

(b) Except as set forth in Schedule 4.04(b) of the Company Disclosure Schedules, there are no preemptive or other outstanding rights, options, warrants, phantom interests, conversion rights, equity appreciation rights, profit participation rights, redemption rights, repurchase rights, agreements, arrangements, calls or commitments of any kind that obligate the Company to issue or to sell any Equity Securities of the Company, or any securities or obligations convertible or exchangeable into or exercisable for, valued by reference to or giving any Person a right to subscribe for or acquire, any Equity Securities of the Company or to vote with the Company Stockholders on any matter, and no securities or obligations evidencing such rights are authorized, issued or outstanding. Except as set forth in Schedule 4.04(b) of the Company Disclosure Schedules, the Company is not party to any stockholders agreement, voting agreement or registration rights agreement relating to its Equity Securities.

(c) The Company Common Stock to be issued by the Company in connection with the Transactions, upon issuance in accordance with the terms of this Agreement, will be duly authorized, validly issued, fully paid and nonassessable, and will not be subject to any preemptive rights, free and clear of all Liens (other than restrictions on transfer under applicable Securities Laws and the Existing Company Charter).

(d) A list of all the Company's Subsidiaries is set forth on Schedule 4.04(d) of the Company Disclosure Schedules. Each Subsidiary of the Company is an entity duly organized, validly existing and in good standing under the Laws of the jurisdiction of its organization, has all requisite corporate power and authority to own, lease and operate its properties and assets and to carry on its business as currently conducted, and is duly qualified to do business and is in good standing (to the extent applicable in such jurisdiction), under the Laws of all jurisdictions in which the character of the properties it owns, operates or leases or the nature of its activities makes such qualification necessary.

###### Section 4.05 Financial Statements; Internal Controls.

(a) The unaudited statements of financial position, statements of comprehensive income, statements of changes in stockholders' equity and statements of cash flows of the Company for the period ended December 31, 2025 (collectively, the "Financial Statements"), were prepared in accordance with the standards, principles and practices specified therein and, subject thereto, in accordance with GAAP and applicable Law as at the Balance Sheet Date, except as otherwise noted therein. The books of account and other financial records of the Company and each Subsidiary of the Company are true and complete in all material respects.

(b) The Financial Statements fairly present in all material respects the assets, liabilities, cash flow and financial condition and results of operations of the Company as of the times and for the periods referred to therein. Since the Balance Sheet Date, the Company has not made any material change in the accounting practices or policies applied in the preparation of the Financial Statements, except as required by applicable Law or GAAP.

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(c) The Company and, to the Knowledge of the Company, any director, officer, employee, auditor, accountant or representative of the Company, has not received or otherwise had or obtained knowledge of any complaint, allegation, assertion or claim, whether written or, to the Knowledge of the Company, oral, regarding the accounting or auditing practices, procedures, methodologies or methods of the Company or their respective internal accounting controls, including any such complaint, allegation, assertion or claim that the Company has engaged in questionable accounting or auditing practices and there have been no internal investigations regarding accounting or revenue recognition discussed with, reviewed by or initiated at the direction of the chief executive officer, chief financial officer, general counsel, the board of directors of the Company or any committee thereof.

(d) The information to be supplied by or on behalf of the Company for inclusion or incorporation by reference in the Proxy Statement to be filed by Acquiror with respect to the approval of the Share Issuances (, the "Required Acquiror Stockholder Proposal"), shall not, on the date the Proxy Statement and any amendments or supplements thereto is first filed with the SEC and at the time it is first mailed to Acquiror Stockholders, or at any time thereafter up to and including the Effective Time, contain any untrue statement that, at such time and in light of the circumstances under which it shall be made, is false or misleading with respect to any material fact, or omit to state any material fact necessary in order to make the statements made in the Proxy Statement not false or misleading; or omit to state any material fact necessary to correct any statement in any earlier communication with respect to the Required Acquiror Stockholder Proposals that has become false or misleading.

###### Section 4.06 Compliance with Laws.

(a) The Company is conducting and has conducted its business in compliance in all material respects with all Laws applicable to it and the Company's business, properties or other assets.

(b) The Company has not received any written notice (official or otherwise) from any Governmental Authority (i) with respect to an alleged, actual or potential violation and/or failure to comply, in any material respect, with any such applicable Law or (ii) requiring the Company to take or omit any material action to ensure compliance with any such applicable Law.

(c) The Company possesses all permits, approvals, orders, authorizations, consents, licenses, certificates, franchises, accreditations, waivers, identification numbers, exemptions of, or filings or registrations (excluding Intellectual Property registrations and certifications) with, or issued by, any Governmental Authority necessary for the ownership and use of the assets of the Company and the operation of the Company's business as currently conducted (the "Company Permits"), except where the failure to possess the same has not had or would not, individually or in the aggregate, reasonably be expected to be material to the Company. Except as has not had or would not, individually or in the aggregate, reasonably be expected to be material to the Company, all such Company Permits are valid and in full force and effect, and there are no lawsuits or other proceedings pending before or, to the Knowledge of the Company, threatened by any Governmental Authority that seek the revocation, cancellation, suspension or adverse material modification thereof. Except as has not had or would not, individually or in the aggregate, reasonably be expected to be material to the Company, the Company in not default, and, to the Knowledge of the Company, no condition exists that with notice or lapse of time or both would constitute a default, under the Company Permits.

Section 4.07 Absence of Certain Changes or Events. Since the Balance Sheet Date and through the date hereof, and except as expressly set forth on Schedule 4.07 of the Company Disclosure Schedules or as required by this Agreement, (a) the Company has conducted its businesses in all material respects in the ordinary course (and in a manner consistent with past practice) and (b) there has not been any change, effect, event, circumstance, occurrence or state of facts that would, individually or in the aggregate, reasonably be expected to have a Company Material Adverse Effect.

Section 4.08 No Undisclosed Liabilities. Except (a) as disclosed, reflected or reserved against in the Financial Statements or the notes thereto, (b) for liabilities incurred in the ordinary course of business since the Balance Sheet Date, (c) as expressly permitted or contemplated by this Agreement or otherwise incurred in connection with the Transactions, (d) as disclosed on Schedule 4.08 of the Company Disclosure Schedules, (e) contingent liabilities under executory contracts and (f) for liabilities that have been discharged or paid in full in the ordinary course of business, as of the date hereof, the Company does not have any material liabilities of any nature, whether accrued, contingent or otherwise required to be reflected on a consolidated balance sheet prepared in accordance with GAAP consistently applied and in accordance with past practice.

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#### Section 4.09 Ownership and Control of Digital Assets and Other Property and Equipment

(a) As of the date hereof, the Company does not hold any material amount of Digital Assets. The Company has not commenced commercial digital asset mining operations and has not received mining rewards prior to the date of this Agreement.

(b) To the extent any, the Company owns, or validly leases, all real property, facilities, and equipment used or intended to be used in its digital asset mining business free and clear of all Liens other than Permitted Liens. All such equipment is owned by the Company and has been acquired in compliance in all material respects with applicable Law.

(c) Upon commencement of digital asset mining operations, any Digital Assets mined or otherwise earned by the Surviving Corporation will be owned exclusively by the Surviving Corporation, and the Surviving Corporation will have sole control over any wallets, private keys, seed phrases, or other credentials necessary to access and transfer such Digital Assets, subject only to customary, temporary arrangements with third-party service providers in the ordinary course of business.

(d) The Company has not yet commenced commercial digital asset mining operations. Other than preparatory activities, including the acquisition of equipment and real property, the Company is not currently operating mining rigs or earning mining rewards. The Company has not received written notice from any Governmental Authority or contractual counterparty alleging that the planned commencement of such operations would violate applicable Law.

(e) To the Knowledge of the Company, there are no pending or publicly announced hard forks, protocol changes, or similar events with respect to the digital asset networks on which the Company intends to mine that would reasonably be expected to materially impair the Company's contemplated mining operations.

#### Section 4.10 Litigation

(a) Except as set forth on Schedule 4.10(a) of the Company Disclosure Schedules, there is no Action pending or, to the Knowledge of the Company, threatened against the Company or any of its Subsidiaries, or any property or asset of the Company or any of its Subsidiaries.

(b) Except as set forth on Schedule 4.10(b) of the Company Disclosure Schedules, the Company is not a party to or subject to the provisions of any outstanding Governmental Order (except if generally applicable without the Company being named therein).

#### Section 4.11 Contracts

(a) Schedule 4.11(a) of the Company Disclosure Schedules sets forth a true and complete list as of the date hereof of the following types of Contracts to which the Company is a party or is bound (other than any Contracts under which the Company does not have any continuing or potential liability and the Lease Documents set forth on Schedule 4.18(c), Contracts set forth on Schedule 4.25, Company Benefit Plans set forth on Schedule 4.12(a)) (all such Contracts set forth on Schedule 4.11(a), or which are required to be so disclosed, the "Material Contracts"):

- (i) each Contract with consideration paid or would reasonably be expected to be payable to the Company of more than \$50,000, in the aggregate, over any twelve (12)-month period;
- (ii) all distributor, agency, sales promotion, market research, marketing consulting and advertising Contracts or arrangements that are material to the business of the Company;
- (iii) all Contracts (excluding Contracts for employment) with management and consultants;
- (iv) all bonus and commission plans of the Company with a reasonably expected value in excess of \$50,000 in any 12-month period;

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(v) all Contracts involving the payment or payment of royalties or other amounts calculated based upon the revenues or income of the Company or income or revenues related to any Product of the Company to which the Company is a party;

(vi) all Contracts evidencing Indebtedness for borrowed money in an amount greater than \$50,000, and any pledge agreements, security agreements or other collateral agreements in which the Company granted to any person a Lien on any of the property or assets of the Company;

(vii) all partnership, joint venture or similar agreement or arrangement, including as may be provided in any letter of intent, memorandum of understanding or agreement in principle;

(viii) all Contracts, including any grant agreements with any economic development corporation, with any Governmental Authority to which the Company is a party, other than any Company Permits;

(ix) all Contracts that (a) limit, or purport to limit, in any material respect, the ability of the Company to compete in any line of business or material business activity or with any Person or in any jurisdiction or during any period of time, excluding customary non-solicitation obligations entered into in the ordinary course of business and confidentiality agreements and agreements that contain customary confidentiality clauses, and (b) that impose "most favored nations" or "most favored supplier" restrictions;

(x) all Contracts that result in any Person or entity holding a power of attorney from the Company;

(xi) all leases or master leases of personal property reasonably likely to result in annual payments of \$50,000 or more in a 12-month period;

(xii) any note, mortgage, indenture or other obligation or agreement or other instrument for or relating to indebtedness for borrowed money in excess of \$50,000, or any guarantee of third party obligations in excess of \$50,000, or any letters of credit, performance bonds or other credit support for the Company;

(xiii) all Contracts for the employment or engagement of any employee, officer, director or other individual service provider that (A) provide for annualized base compensation in excess of \$100,000 or (B) are not terminable by the Company on no more than 30 days' notice and without liability to or financial obligation by the Company;

(xiv) any collective bargaining agreement or other Contract with any labor union, works council, or other labor organization (each, a "CBA");

(xv) Contracts which involve the license or grant of rights under any Intellectual Property owned by a third party to the Company, or under Company Intellectual Property by the Company to a third party, excluding (A) nondisclosure agreements entered into in the ordinary course of business by the Company; (B) licenses of commercially available and/or off-the-shelf Software (including Software provided as a service) or other standard or commercially available Intellectual Property licensed under shrinkwrap, clickwrap, online terms of use or service or other standard license terms with an aggregate annual license cost of \$50,000 or less; (C) Contracts between the Company and its customers entered into in the ordinary course of business in which Company Intellectual Property is licensed on a non-exclusive basis; (D) invention assignment and confidentiality agreements between the Company and its employees and/or independent contractors entered into by the Company in the ordinary course of business on the standard form(s) of such Contract(s) made available to Acquiror; (E) Contracts between the Company and its vendors or suppliers entered into in the ordinary course of business in which the Company has granted a license to the supplier or vendor (i) to use the Company's trademarks, service marks, or other source identifiers for purposes of indicating that the Company is a customer of the vendor or supplier; (ii) to use feedback, suggestions or ideas provided by the Company to the vendor or supplier; or (iii) to use any Company Intellectual Property for purposes of providing goods or services to or as directed by the Company, and (F) Contracts under which the license or grant of rights is merely incidental to the transaction(s) contemplated by such Contract;

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(xvi) any Contract that is a settlement, conciliation or similar agreement with any Governmental Authority or pursuant to which the Company will have any material outstanding obligation after the date of this Agreement;

(xvii) all Contracts for the development of Intellectual Property for the benefit of the Company (other than invention assignment and confidentiality agreements entered into with employees and contractors of the Company that have provisions relating to confidentiality and assignment of Intellectual Property that are materially similar to the confidentiality and Intellectual Property assignment provisions set forth in the standard form(s) of such agreement(s) used by the Company and made available to Acquiror); and

(xviii) any principal transaction Contract entered into in connection with a completed acquisition or disposition by the Company or any of its Subsidiaries involving consideration in excess of \$150,000 of any Person or other business organization, division or business of any Person (including through merger or consolidation or the purchase of a controlling equity interest in or substantially all of the assets of such Person or by any other manner).

(b) Except as set forth on Schedule 4.11(b) of the Company Disclosure Schedules, the Company (i) is not, nor has it received written or, to the Knowledge of the Company, oral notice that any other party to any Material Contract is, except as such may be limited the Enforceability Exceptions, in material violation or material breach of or material default (immediately or upon notice or lapse of time) under or (ii) has not waived or failed to enforce any material rights or material benefits under any Material Contract to which it is a party or any of its properties or other assets is subject. No Material Contract is the subject of a written notice to terminate delivered or communicated in accordance with the terms of any Material Contract, except for any expiration of the term of a Material Contract following the date of this Agreement in accordance with its terms. Each Material Contract is in full force and effect and, subject to the Enforceability Exceptions, is legal, valid and binding on the Company, and, to the Knowledge of the Company, each other party thereto, except as would not be material and adverse to the Company, taken as a whole. Except as set forth on Schedule 4.11(b) of the Company Disclosure Schedules, there is no default under any such Material Contracts by the Company, or, to the Knowledge of the Company, any other party thereto, and no event has occurred that with the lapse of time or the giving of notice or both would constitute a default thereunder by the Company, or, to the Knowledge of the Company, any other party thereto, in each case, except as would not be material and adverse to the Company, taken as a whole.

#### Section 4.12 Employee Benefits.

(a) Schedule 4.12(a) of the Company Disclosure Schedules sets forth an accurate and complete list of each material Company Benefit Plan.

(b) No Company Benefit Plan is or was at any time subject to the Laws of the United States nor any State therein, and no Company Benefit Plan benefits nor at any time benefited any individuals who are or were United States citizens and/or residents or taxpayers. Neither the Company nor any ERISA Affiliate has or had any liability or obligation, contingent or actual, under ERISA or the Code either individually, collectively or as a result of any affiliation with an ERISA Affiliate.

(c) With respect to each Company Benefit Plan, the Company has made available to Acquiror, if applicable (i) a true and complete copy of the plan document and all amendments thereto and each trust or other funding arrangement, (ii) copies of the most recent summaries or plan descriptions and summaries of material modifications, (iii) copies of annual reports and/or filings required to be made with any applicable Governmental Authority for the past three (3) plan years and (iv) any material non-routine correspondence from any Governmental Authority with respect to any Company Benefit Plan within the past three (3) years. The Company has no express commitment to modify, change or terminate any Company Benefit Plan, other than with respect to a modification, change or termination required by applicable Law.

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(d) Neither the Company nor its ERISA Affiliates is, nor will it become obligated, whether under any Company Benefit Plan, employment agreement, consulting agreement, or other arrangement, whether written or unwritten, to pay separation, severance, termination or similar benefits to any person directly as a result of the Transactions, nor will the Transactions accelerate the time of payment or vesting, or increase the amount, of any benefit or other compensation due to any individual. The Transaction shall not be the direct or indirect cause of any amount paid or payable by the Company or a Subsidiary being classified as an "excess parachute payment" under Section 280G of the Code.

(e) None of the Company Benefit Plans provides, nor does the Company have or reasonably expect to have any obligation to provide health benefits to any current or former employee, officer, director or consultant of the Company after termination of employment or service except as may be required under applicable Law.

(f) Each Company Benefit Plan is and has been within the past six (6) years in compliance, in all material respects, in accordance with its terms and the requirements of all applicable Laws. The Company and its ERISA Affiliates has performed, in all material respects, all obligations required to be performed by them under, are not in any material respect in default under or in violation of, and have no knowledge of any default or violation in any material respect by any party to, any Company Benefit Plan. No Action is pending or, to the knowledge of the Company or its ERISA Affiliates, threatened with respect to any Company Benefit Plan (other than claims for benefits in the ordinary course) and, to the knowledge of the Company and its ERISA Affiliates, no fact or event exists that could reasonably be expected to give rise to any such Action.

(g) There have been no acts or omissions by the Company or its ERISA Affiliates that have given or could reasonably be expected to give rise to any material fines, penalties, Taxes or related charges under applicable Law for which the Company or its ERISA Affiliates may be liable.

(h) All contributions, premiums or payments required to be made with respect to any Company Benefit Plan have been timely made to the extent due or properly accrued on the consolidated financial statements of the Company, except as would not result in material liability to the Company.

#### Section 4.13 Labor and Employment.

(a) Schedule 4.13(a) of the Company Disclosure Schedules sets forth a true, correct and complete list of all current employees of the Company, as of a date not more than five (5) days before the Closing Date, including any employee who is on a leave of absence of any nature, authorized or unauthorized, and sets forth for each such individual the following: (i) name; (ii) title or position (including whether full or part time); (iii) hire date; (iv) current annual base compensation rate; (v) commission, bonus or other incentive based compensation; and (vi) the term of their employment (indefinite or definite). As of the date hereof, all compensation, including wages, commissions and bonuses, due and payable to all employees for services performed on or prior to the date hereof, has been paid in full.

(b) Except as set forth on Schedule 4.13(b) of the Company Disclosure Schedules, (i) there are no material Actions pending or, to the knowledge of the Company, threatened in writing against the Company alleging violations of any Law pertaining to labor relations or employment matters, by any of their respective current or former employees, which Actions would be material to the Company, taken as a whole; (ii) the Company is not, nor has the Company been for the past six (6) years, a party to, bound by, or negotiating any collective bargaining agreement or other contract with a union, works council or labor organization applicable to persons employed by the Company, nor, to the knowledge of the Company, is there a union organizing campaign in progress with respect to any such employees; (iii) there are no unfair labor practice complaints pending against the Company before any Governmental Authority; and (iv) for the past two (2) years there has not been, nor, to the knowledge of the Company, has there been threatened in writing, any strike, slowdown, work stoppage, lockout, concerted refusal to work overtime or other material labor dispute affecting any employees of the Company.

(c) The Company is, and for the last six (6) years has been, in compliance in all material respects with all applicable Laws relating to the employment, employment practices, employment discrimination, terms and conditions of employment, mass layoffs and plant closings (including the Worker Adjustment and Retraining Notification Act of 1988, as amended, or any similar Laws), immigration, meal and rest breaks, pay equity, workers' compensation, family and medical leave, and occupational safety and health requirements, including those related to wages, hours, collective bargaining and the payment and withholding of Taxes and other sums as required by the appropriate Governmental Authority and are not liable for any arrears of wages, Taxes, penalties or other sums for failure to comply with any of the foregoing.

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(d) To the Knowledge of the Company, no current or former employee or independent contractor of the Company is in any material respect in violation of any term of any employment agreement, nondisclosure agreement, common law nondisclosure obligation, fiduciary duty, noncompetition agreement, non-solicitation agreement, restrictive covenant or other obligation: (i) owed to the Company; or (ii) owed to any third party with respect to such Person's right to be employed or engaged by the Company. To the Knowledge of the Company, no current employee of the Company with annualized base compensation at or above \$250,000, has given notice to the Company that the employee intends to terminate his or her employment prior to the one-year anniversary of the Closing.

(e) The Company has promptly, thoroughly and impartially investigated all sexual harassment, or other unlawful discrimination or unlawful retaliation, complaints made by or against employees of the Company, in each case in connection with their employment with the Company, of which it has been made aware in the past two (2) years. With respect to each such complaint to the extent warranted based on the Company's investigation, the Company has taken prompt corrective action that is reasonably calculated to prevent further improper action. The Company does not reasonably expect any material liabilities with respect to any such complaints and, to the Knowledge of the Company, there are no such complaints relating to officers, directors, employees, contractors, or agents of the Company relating to their employment with or service to the Company, that, if known to the public, would bring the Company into material disrepute.

(f) Except as would not result in material liability for the Company, in the past six (6) years the Company has fully and timely paid all (i) wages, salaries, wage premiums, commissions, overtime, bonuses, severance and termination payments, fees, and other compensation that has come due and payable to its current or former employees and independent contractors under applicable Laws, Contract or Company policy, and (ii) fines, Taxes, interest, or other penalties for any failure to pay or delinquency in paying such compensation.

#### Section 4.14 Taxes.

(a) The Company: (i) has duly and timely filed (taking into account any extension of time within which to file) all material Tax Returns required to be filed by any of them as of the date hereof and all such filed Tax Returns are complete and accurate in all material respects; (ii) has timely paid all material Taxes that are shown as due on such filed Tax Returns and any other material Taxes that the Company is otherwise obligated to pay, and no material penalties or charges are due with respect to the late filing of any Tax Return required to be filed by or with respect to any of them on or before the Effective Time; (iii) with respect to all material Tax Returns filed by or with respect to them, have not waived any statute of limitations with respect to Taxes or agreed to any extension of time with respect to a Tax assessment or deficiency; and (iv) do not have any deficiency, audit, examination, investigation or other proceeding in respect of Taxes or Tax matters pending or proposed or threatened in writing, for a Tax period which the statute of limitations for assessments remains open.

(b) The Company is not a party to, bound by or otherwise obligated under any Tax sharing agreement, Tax indemnification agreement, Tax allocation agreement or similar contract or arrangement (including any agreement, contract or arrangement providing for the sharing or ceding of credits or losses) or has a potential liability or obligation to any person as a result of or pursuant to any such agreement, contract, arrangement or commitment other than an agreement, contract, arrangement or commitment the primary purpose of which does not relate to Taxes.

(c) The Company will not be required to include any material item of income in, or exclude any material item of deduction from, taxable income for any taxable period (or portion thereof) ending after the Closing

Date as a result of any: (i) change in method of accounting for a taxable period ending on or prior to the Closing Date under Code Section 481(c) (or any corresponding or similar provision of state, local or non-U.S. income Tax Law); (ii) "closing agreement" as described in Code Section 7121 (or any corresponding or similar provision of state, local or non-U.S. income Tax Law) executed on or prior to the Closing Date; or (iii) installment sale made on or prior to the Closing Date; (iv) prepaid amount received or deferred revenue accrued on or prior to the Closing Date outside of the ordinary course of business; or (v) intercompany item under Treasury Regulation Section 1.1502-13 (or any corresponding or similar provision of U.S. state or local or non-U.S. Law) or excess loss account under Treasury Regulation Section 1.1502-19 (or any corresponding or similar provision of U.S. state or local or non-U.S. Law).

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(d) The Company has withheld and paid to the appropriate Tax Authority all material Taxes required to have been withheld and paid in connection with amounts paid or owing to any current or former employee, independent contractor, creditor, stockholder or other third party and has complied in all material respects with all applicable Laws, rules and regulations relating to the payment and withholding of Taxes.

(e) The Company has not been a member of an affiliated group filing a consolidated, combined or unitary U.S. federal, state, local or non-U.S. income Tax Return (other than a group of which the Company was the common parent).

(f) The Company does not have material liability for the Taxes of any person (other than the Company) under Treasury Regulation Section 1.1502-6 (or any similar provision of state, local or non-U.S. Law), as a transferee or successor, by contract or otherwise.

(g) The Company does not have any request for a material ruling in respect of Taxes pending between the Company or any Company Subsidiary and any Tax Authority.

(h) The Company has made available to Acquiror true, correct, and complete copies of the income Tax Returns filed by the Company for tax years through 2025.

(i) The Company has not in any year for which the applicable statute of limitations remains open distributed stock of another person, or has had its stock distributed by another person, in a transaction that was purported or intended to be governed in whole or in part by Section 355 or Section 361 of the Code.

(j) The Company has not engaged in or entered into a "listed transaction" within the meaning of Treasury Regulation Section 1.6011-4(b)(2) (or any corresponding or similar provision of state, local or non-U.S. income Tax Law).

(k) No Governmental Authority has asserted in writing or, to the knowledge of the Company, has threatened to assert against the Company any deficiency or claim for any Taxes or interest thereon or penalties in connection therewith.

(l) There are no Tax Liens upon any assets of the Company except for Permitted Liens.

(m) The Company has not been a United States real property holding corporation within the meaning of Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code. The Company: (A) is not a "controlled foreign corporation" as defined in Section 957 of the Code, (B) does not have a permanent establishment (within the meaning of an applicable Tax treaty) or otherwise has an office or fixed place of business in a country other than the country in which it is organized or (C) is not otherwise subject to taxation in a country other than the country in which it is organized.

(n) The Company is in compliance in all material respects with applicable transfer pricing Laws.

(o) The Company has not taken, and will not take prior to the Closing, any action, and to the Knowledge of the Company, no action has been taken or is currently planned or contemplated, that would, or would reasonably be expected to, cause the Merger to fail to qualify for the Intended Tax Treatment.

(p) Except as set forth in Schedule 4.14(p) of the Company Disclosure Schedules, the Company does not have outstanding any warrants, options, convertible securities or other rights or instruments that, if exercised or converted immediately prior to the Effective Time, would result in the issuance of shares of Existing Company Stock in a manner that would adversely affect the qualification of the Merger for the Intended Tax Treatment or the satisfaction of the continuity of interest requirement under Treasury Regulations Section 1.368-1(c) (to the extent applicable).

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(q) The fair market value of the Merger Consideration (consisting of shares of Acquiror Preferred Stock) to be received by each holder of Existing Company Common Stock in the Merger will be approximately equal to the fair market value of the Existing Company Common Stock surrendered by such holder in exchange therefor. No holder of Existing Company Common Stock has received or will receive, directly or indirectly, any consideration from any party in connection with the Merger other than the Merger Consideration, except for cash paid in lieu of fractional shares, if any, as provided in Section 3.03. No portion of the proceeds of the PIPE Offering shall be paid, distributed, or otherwise transferred, directly or indirectly, to any holder of Existing Company Common Stock in connection with the Transactions.

(r) The Company is not an "investment company" as defined in Section 368(a)(2)(F)(iii) and (iv) of the Code.

(s) Immediately prior to the Effective Time, the holders of Existing Company Common Stock, together with the PIPE investors (to the extent the Merger and the PIPE Offering are treated as an integrated transaction for purposes of Section 351(a) of the Code), will collectively own, or will be treated as owning for purposes of Section 351(a), at least eighty percent (80%) of (i) the total combined voting power of all classes of stock of Acquiror entitled to vote and (ii) the total number of shares of all other classes of stock of Acquiror, in each case immediately after the Effective Time, within the meaning of Section 368(c) of the Code, if the Merger and the PIPE Offering are treated as an integrated transaction qualifying under Section 351(a) of the Code.

#### Section 4.15 Intellectual Property.

(a) Schedule 4.15(a) of the Company Disclosure Schedules contains a complete and accurate list of all (i) issued patents and pending patent applications, (ii) trademark and service mark registrations and applications, (iii) copyright registrations and (iv) registered domain names, in each case that are owned by the Company (collectively, "Registered IP"), indicating for each item, as applicable, the registration or application number, the applicable filing jurisdiction and the date of filing or issuance, and registrar. The Company exclusively owns all right, title, and interest in and to the Registered IP, free and clear of any Liens other than Permitted Liens. All assignments and other instruments necessary to establish and perfect the Company's ownership of the Registered IP have been duly executed and, where recordable, recorded with the applicable Governmental Authority, and the Company is the sole record owner of each item of Registered IP. The Registered IP is subsisting and, excluding any Registered IP which is the subject of an application for registration or issuance, has not been held invalid by any Governmental Authority and is enforceable, in each case, except as would not be material and adverse to the Company, taken as a whole.

(b) The Company solely and exclusively owns all right, title, and interest in and to or is licensed to use or otherwise has the right to use all Company Intellectual Property. All Company Intellectual Property shall be owned or available for use by the Company immediately after the Closing on terms and conditions no less favorable to the Company (and without any material impairment, cancellation, acceleration, termination, price increase, imposition of additional restrictions, or loss of scope) than those under which the Company owned or used such Intellectual Property immediately prior to the Closing, in each case, except as would not be material and adverse to the Company, taken as a whole.

(c) Except as set forth on Schedule 4.15(c) of the Company Disclosure Schedules, to the Knowledge of the Company, (i) the operation of the business of the Company as currently and formerly conducted does not infringe, misappropriate, dilute or otherwise violate, and has not infringed, misappropriated, diluted or otherwise violated, any third-party Intellectual Property, and (ii) to the Knowledge of the Company, no third party infringes, misappropriates, dilutes or otherwise violates on the date of this Agreement, and no third party has infringed, misappropriated, diluted or otherwise violated any material Owned Intellectual Property.

(d) As of the date hereof, there is no Action pending or threatened in writing against the Company (i) challenging the ownership, validity, registrability, patentability, or enforceability of the Owned Intellectual Property (excluding office actions and similar ex-parte proceedings in connection with the prosecution of applications for the registration or issuance of any Intellectual Property) or (ii) asserting that the Company has infringed, misappropriated, diluted or otherwise violated any third-party Intellectual Property.

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(e) The Company has not received any funding from any university or other educational or research center or Governmental Authority. No such university, educational or research center, or Governmental Authority has any rights in or to any Owned Intellectual Property or, to the Knowledge of Company, any other Intellectual Property used in or necessary for the business of the Company as currently conducted.

(f) None of the Company Software is developed, used, distributed or modified under any Open Source Software license in a manner which has or would require any disclosure, licensing or distribution of the source code of any such Company Software to any Person, other than the applicable Open Source Software. The Company has complied, and currently complies, in all material respects with the terms of all applicable Open Source Software licenses.

(g) The Company has taken and takes commercially reasonable actions to maintain, protect and enforce Intellectual Property rights in the trade secrets owned by the Company.

#### Section 4.16 Data Protection; Data Privacy.

(a) The Company (i) is, and at all times during the past three (3) years has been, in compliance in all material respects with all Privacy Laws, (ii) has not been subject to any regulatory audits, or, to the Knowledge of the Company, investigations by any Governmental Authority relating to Privacy Laws, and (iii) has taken reasonable and appropriate technical and organizational measures to ensure that all Personal Information is protected in all material respects against loss and against unauthorized access, use, modification, disclosure or other use or misuse. To the Knowledge of the Company, there has been no loss, theft or unauthorized access to or misuse of any Personal Information, in each case, that has resulted in, or is reasonably likely to result in, material liability to the Company, taken as a whole.

(b) The Company has not received any written requests, complaints or objections to its collection or use of Personal Information from any data protection authority or third party (including data subjects) that remains unresolved that has resulted in, or is reasonably likely to result in, material liability to the Company, taken as a whole. No individual has been awarded compensation from the Company under any Privacy Laws, and no

written claim for such compensation is outstanding.

(c) The Company does not sell, rent or otherwise make available to any Person any Personal Information, except in a manner that complies in all material respects with all applicable Privacy Laws. The execution, delivery and performance of this Agreement and the transactions contemplated hereby (including any transfers of or access to Personal Information in connection therewith) comply, and will comply, in all material respects, with all Privacy Laws and other contractual commitments related to the privacy and security of Personal Information to which the Company is bound, except as would not be material and adverse to the Company, taken as a whole.

(d) The Company and its Subsidiaries have in place, comply with, and take appropriate steps reasonably designed to ensure compliance with their internal and publicly posted policies and procedures relating to data privacy and security and the collection, storage, processing, use, disclosure, handling and analysis of Personal Data (the "Policies"). "Personal Data" means (i) a natural person's name, street address, telephone number, email address, photograph, social security 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 GDPR; and (iv) 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 identifiable data related to an identified person's health or sexual orientation. The Company provides accurate and sufficient notice of its applicable Policies to its customers, employees, third party vendors and representatives as required by Privacy Laws, and such Policies do not contain any material omissions of the Company's then-current privacy practices. No disclosures made or contained in any of the Policies are or have been inaccurate, misleading, or deceptive in violation of any Privacy Laws, and the execution, delivery and performance of this Agreement will not result in a breach of any Privacy Laws or Policies. Neither the Company nor its Subsidiaries, (i) has received written notice of any actual or potential liability of the Company or its Subsidiaries under, or actual or potential violation by the Company or its Subsidiaries of, any of the Privacy Laws; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation or other corrective action pursuant to any regulatory request or demand pursuant to any Privacy Law; or (iii) is a party to any order, decree, or agreement by or with any Governmental Authority that imposed any obligation or liability under any Privacy Law.

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#### Section 4.17 Information Technology.

(a) The IT Systems: (i) operate and perform in material accordance with the requirements of the Company for the operation of its business as currently conducted and are sufficient for the operation of the business as currently conducted and (ii) are free from bugs and other defects, except for defects that have not resulted in, and would not reasonably be expected to result in, material disruption to the business of the Company.

(b) The Company has taken and is taking reasonable and appropriate technical and organizational measures to protect the confidentiality, integrity and security of the IT Systems used in the operation of the business of the Company from any unauthorized use, access, interruption, or modification. Such IT Systems are sufficient for the operation of the business of the Company as currently conducted, including as to capacity, scalability and ability to process current and anticipated peak volumes in a timely manner. The IT Systems include a sufficient number of license seats for all Software licensed by the Company from third parties as necessary for the usage of such Software in the operation of the business of the Company as currently conducted and in compliance with the applicable license terms.

(c) There have been no unauthorized intrusions, failures, breakdowns, security breaches, continued substandard performance, or other adverse events affecting any such IT Systems that have caused any substantial disruption of or interruption in or to the use of such IT Systems or any unauthorized use, misappropriation, modification, encryption, corruption, disclosure, or transfer of any information or data contained therein, in each case, that has resulted in, or is reasonably likely to result in, material liability to the Company. The Company maintains, complies with, and enforces disaster recovery and business continuity plans, procedures and facilities in connection with the operation of the business of the Company that are consistent with industry standards, acts in compliance therewith, and has taken commercially reasonable steps to test such plans and procedures on a periodic basis, and such plans and procedures have been proven effective upon such testing in all material respects.

(d) (i) The Company and its Subsidiaries are, and at all times during the past three years were, in compliance with all applicable data privacy and security laws and regulations, including, as applicable, the European Union General Data Protection Regulation ("GDPR") (EU 2016/679) (collectively, "Privacy Laws"); (ii) the Company and its Subsidiaries have in place, comply with, and take appropriate steps reasonably designed to ensure compliance 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"); (iii) the Company provides accurate notice of its applicable Policies to its customers, employees, third party vendors and representatives as required by Privacy Laws; and (iv) applicable Policies provide accurate and sufficient notice of the Company's then-current privacy practices relating to its subject matter, and do not contain any material omissions of the Company's then-current privacy practices, as required by Privacy Laws. "Personal Data" means (i) a natural person's name, street address, telephone number, email address, photograph, social security 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 GDPR; and (iv) 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 identifiable data related to an identified person's health or sexual orientation. None of such disclosures made or contained in any of the Policies have been inaccurate, misleading, or deceptive in violation of any Privacy Laws and the execution, delivery and performance of this Agreement will not result in a breach of any Privacy Laws or Policies. Neither the Company nor its Subsidiaries, (i) has, to the Knowledge of the Company, received written notice of any actual or potential liability of the Company or its Subsidiaries under, or actual or potential violation by the Company or its Subsidiaries of, any of the Privacy Laws; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation or other corrective action pursuant to any regulatory request or demand pursuant to any Privacy Law; or (iii) is a party to any order, decree, or agreement by or with any Governmental authority that imposed any obligation or liability under any Privacy Law.

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#### Section 4.18 Real Property.

(a) The Company does not own any real property.

(b) Schedule 4.18(b) of the Company Disclosure Schedules contains a complete and accurate list by property, city, state and country, of all real property leasehold or subleasehold estates and other rights to possess or occupy any land, buildings, structures, improvements, fixtures or other interest in real property held by the Company as of the date of this Agreement (the "Leased Company Properties"). The Company is the sole legal and beneficial owner of a leasehold or subleasehold interest in, or other right to possess or occupy, the Leased Company Properties.

(c) Schedule 4.18(c) of the Company Disclosure Schedules contains a complete and accurate list of all leases, subleases, licenses, concessions, and other Contracts, agreements and leasehold arrangements and all related supplemental documents (collectively, the "Lease Documents") pursuant to which the Company leases, licenses, subleases or otherwise occupies any Leased Company Property on the date hereof. The Company has delivered to Acquiror a true and complete copy of each such Lease Document. Neither the Company nor, to the Knowledge of the Company, any other party to any Lease Document is in material breach or material default under such Lease Document, and no event has occurred or circumstances exist which, with the delivery of notice, the passage of time or both, would constitute such a breach or default, or permit the termination or acceleration of rent under such Lease Document, by the Company or, to the Knowledge of the Company, any other party thereto.

(d) Each Lease Document is a written agreement in full force and effect, and, subject to the Enforceability Exceptions, is legal, valid, binding and enforceable against the Company that is a party to such Lease Document and, to the Knowledge of the Company, any other party to such Lease Document. The Company has paid the rent and all other sums that are due and payable under such Lease Documents and there are no significant arrears thereunder due and payable by the Company.

(e) To the Knowledge of the Company, there exist no restrictions, covenants or encumbrances which encumber any of the Leased Company Properties and which prevent any of the Leased Company Properties from being used now or in the future for their current use or would prevent, or require consent from a third party as a result of, the consummation of the transactions contemplated by this Agreement or which would be material and adverse to the Company, taken as a whole.

(f) The Company has not, at any time, given any covenant or entered into any agreement in respect of any leasehold real property other than the Leased Company Properties in respect of which any material contingent liability of the Company remains as of the date of this Agreement. The Company has not subleased, licensed or otherwise granted any Person the right to use or occupy any Leased Company Property or any portion thereof, and the Company has not collaterally assigned or granted any other security interest in any Lease Document or any interest therein.

(g) As of the date of this Agreement, to the Knowledge of the Company, there are no material outstanding Actions to which the Company is a party in respect of any of the Leased Company Properties, other than nondelinquent real property assessments affecting the Leased Company Properties. As of the date of this Agreement, the Company's possession and quiet enjoyment of the Leased Company Property under each Lease Document is not materially disturbed.

#### Section 4.19 Anti-Bribery; Trade Controls Compliance.

(a) Anti-Bribery. The Company and each of its managers, officers, directors, employees, and to the Knowledge of the Company, agents, and any other Person acting on their behalf, (i) are and have been, in compliance with the anti-bribery Laws and anti-corruption Laws of each jurisdiction in which the Company operates or has operated, including the U.S. Foreign Corrupt Practices Act of 1977, as amended (collectively, "Anti-Bribery Laws"); and (ii) have not paid, given, offered or promised to pay, or authorized or ratified the payment or transfer, directly or indirectly, of any monies or anything of value to any Public Official or other Person, for the purpose of corruptly influencing any act or decision of such Public Official or of a Governmental Authority, or any other Person, to obtain or retain business, to direct business to any Person, or to secure any other improper benefit or advantage. Except as set forth on Schedule 4.19(a), the Company is not subject, and has not been subject, to any Actions or made any disclosures, voluntary or otherwise, to any Governmental Authority relating to the Anti-Bribery Laws.

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(b) Trade Control Compliance. To the Knowledge of the Company, the Company is and has been, in compliance in all respects with all applicable international trade control compliance Laws, including but not limited to: (a) U.S. Laws governing economic sanctions, including those administered by the U.S. Treasury Department's Office of Foreign Assets Control codified at 31 C.F.R. Part 500 et. seq., and the U.S. Department of State ("Sanctions"); (b) U.S. Laws governing the exportation of goods, technology, software, and services, including the Export Administration Regulations (15 C.F.R. § 730 et seq.), and the International Traffic in Arms Regulations (22 C.F.R. § 120 et seq.); (c) U.S. Laws governing the importation of goods, including laws administered by U.S. Customs and Border Protection; and (d) U.S. Laws governing international boycotts administered by the U.S. Department of Commerce and the Internal Revenue Service (collectively, the "International Trade Laws"). None of the Company and its directors or director equivalents, members, officers, employees, or to the Knowledge of the Company, agents, representatives or other Persons acting on behalf of the Company, (a) have been the target of Sanctions, (b) located, organized, or ordinarily resident in a jurisdiction subject to comprehensive Sanctions (as of the date of this Agreement, Cuba, Iran, North Korea, Syria, and the Crimea, so-called Donetsk People's Republic, and so-called Luhansk People's Republic regions of Ukraine) ("Embargoed Jurisdiction"), or (c) owned fifty percent (50%) or more, directly or indirectly, individually or in aggregate, by Persons listed in (a) or (b) (collectively, a "Sanctioned Person"). To the Knowledge of the Company, the Company has not engaged in any unlawful dealings or transactions, directly or indirectly, with any Sanctioned Persons. The Company is not subject, and have not been subject to any Actions, or made any disclosures to any

Governmental Authority, involving the Company relating to the International Trade Laws. The Company has implemented and administered internal controls, policies and procedures designed, that are reasonably designed to promote compliance with International Trade Laws.

#### Section 4.20 Insurance.

(a) Schedule 4.20(a) of the Company Disclosure Schedules sets forth a true and complete list of the material current insurance policies or binders maintained by the Company (the “Insurance Policies”). To the Knowledge of the Company, there are no events, circumstances or other liabilities that would reasonably be expected to give rise to a material claim under the Insurance Policies.

(b) Except as has not had or would not, individually or in the aggregate, reasonably be expected to be material to the Company, the Insurance Policies are in full force and effect as of the date of this Agreement with respect to the Company, and the limits thereunder have not been impaired, exhausted or materially diminished.

(c) As of the date hereof, the Company has not received any written or oral notice of cancellation of, a material premium increase (relative to others in the industry in which the Company operates) with respect to, or of a material alteration of coverage under, any Insurance Policy. Except as has not had or would not, individually or in the aggregate, reasonably be expected to be material to the Company, all of the Insurance Policies (i) are valid and binding in accordance with their terms, subject to Enforceability Exceptions and (ii) have not been subject to any lapse in coverage. There are no material claims related to the Company or the assets, business, operations, employees, officers and directors of the Company pending under any such Insurance Policies as to which coverage has been denied or disputed or in respect of which there is an outstanding reservation of rights.

Section 4.21 Competition Regulation. Except as set forth on Schedule 4.21 of the Company Disclosure Schedules, the Company is in compliance with all applicable Antitrust Laws in all material respects. The Company is not a party to any agreement or arrangement with a Governmental Authority under any Antitrust Laws in any jurisdiction in which the Company has assets or carries on or intends to carry on business.

#### Section 4.22 Environmental Matters. Except as has not had or would not, individually or in the aggregate, reasonably be expected to be material to the Company:

(a) the Company is in material compliance in all respects with all Environmental Laws and all material Company Permits required under Environmental Laws in connection with the operation of the Company’s business or ownership or operation of the Leased Company Properties, which Company Permits have been obtained by the Company and are current and valid, except as such Company Permit would not be material to the Company’s business, taken as a whole;

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(b) there are no Actions or Governmental Orders pending, or to the Knowledge of the Company, threatened, against the Company, nor, to the Knowledge of the Company, has the Company received any written notification of or otherwise been made aware of, any actual or alleged violation of, or liability under, Environmental Laws;

(c) the Company (or to the Knowledge of the Company, any other Person to the extent giving rise to liability for the Company) has not manufactured, generated, treated, stored, disposed or arranged for disposal of, transported, released, exposed any Person to, or owned or operated any property or facility contaminated by, any Hazardous Material under circumstances or in quantities that violate Environmental Laws or which would reasonably be expected to give rise to liability for the Company pursuant to Environmental Laws;

(d) the Company has not commenced mining operations and has not received written notice of any violation of Environmental Laws relating to its ownership of real property or mining equipment or its planned energy usage; and

(e) the Company has furnished to the Acquiror copies of all material environmental reports, assessments and audits in its possession or reasonable control relating to the Company’s compliance with Environmental Laws or the environmental condition of the real property operated or leased by the Company in connection with its business.

#### Section 4.23 Customers and Suppliers.

(a) Schedule 4.23(a) of the Company Disclosure Schedules sets forth a true, correct and complete list, as of the date of this Agreement, of the 10 largest customers of the Company (each, a “Material Customer”) for the period ended December 31, 2025, measured by the amount of revenue received by the Company during such period. Except as set forth on Schedule 4.23(a) of the Company Disclosure Schedules, as of the date hereof, the Company has not since the Balance Sheet Date received any written, or to the Knowledge of the Company, oral notice that any Material Customer has cancelled, materially decreased or otherwise materially modified, or intends to cancel, materially decrease or otherwise materially modify, its relationship with the Company.

(b) Schedule 4.23(b) of the Company Disclosure Schedules sets forth a complete and correct list, as of the date of this Agreement, of the 10 largest vendors, suppliers, third-party service providers and other similar business relations of the Company (each, a “Material Vendor”) during the year ended December 31, 2025, measured by the amount of expenditure by the Company during such period. Except as set forth in Schedule 4.23(b) of the Company Disclosure Schedules, the Company has not as of the Balance Sheet Date received any written, or to the Knowledge of the Company, oral notice that any Material Vendor has cancelled, terminated or otherwise materially modified, or intends to cancel, terminate or otherwise materially modify its relationship with the Company.

Section 4.24 Brokers. Except as set forth on Schedule 4.24 of the Company Disclosure Schedules, no broker, investment banker, financial advisor or other Person, the fees and expenses of which will be paid by the Company pursuant to an engagement letter entered into therewith, is entitled to any broker’s, finder’s, financial advisor’s or other similar fee or commission in connection with the Transactions based upon arrangements made by or on behalf of the Company.

Section 4.25 Affiliate Agreements. Except as set forth on Schedule 4.25 of the Company Disclosure Schedules, the Company is not party to any transaction, agreement, arrangement or understanding with any (a) present or former executive officer or director of the Company, (b) beneficial owner (within the meaning of Section 13(d) of the Exchange Act) of five (5%) percent or more of the capital stock or equity interests of the Acquiror, Merger Sub or the Company or (c) Affiliate, “associate” or member of the “immediate family” (as such terms are respectively defined in Rules 12b-2 and 16a-1 of the Exchange Act) of any of the foregoing.

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Section 4.26 Assets. The Company owns or leases, and has good, valid and marketable title to, all tangible assets necessary for the conduct of its businesses as presently conducted. Each such tangible asset is free from material defects, has been maintained in accordance with normal industry practice, is in good operating condition and repair (subject to normal wear and tear) and is suitable for the purposes for which it presently is used. No asset of the Company is subject to any Lien.

Section 4.27 No Other Representations or Warranties. The representations and warranties made by the Company in this Article IV are the exclusive representations and warranties made by the Company in connection with this Agreement and the Transactions. Except for the representations and warranties contained in this Article IV, neither the Company, nor any other Person, has made or makes any other express or implied representation or warranty, either written or oral, on behalf of the Company, to the accuracy or completeness of any information regarding the Company available to the other parties or their respective Representatives and expressly disclaims any such other representations or warranties. Acquiror and Merger Sub acknowledge and agree that it is not relying on any representation or warranty of the Company or any other Person other than the representations and warranties expressly set forth in this Agreement. Without limiting the foregoing, Acquiror and Merger Sub acknowledge and agree that neither the Company nor any other Person makes or has made any representation or warranty with respect to any financial projections, forecasts, estimates, budgets or prospective information, or with respect to any information, materials or analyses (including any management presentations, “data room” materials or diligence materials) made available in connection with the negotiation or consummation of the Transactions. Notwithstanding the foregoing, nothing in this Agreement (including this Section 4.27) shall limit or restrict (i) any liability for fraud with respect to the making of the representations and warranties expressly set forth in this Agreement, or (ii) any rights or obligations arising under applicable federal securities Laws.

### ARTICLE V.

#### **REPRESENTATIONS AND WARRANTIES OF ACQUIROR AND MERGER SUB**

Except as set forth in the Acquiror Disclosure Schedules (each of which qualifies (a) the correspondingly numbered representation, warranty or covenant if specified therein and (b) such other representations, warranties or covenants where its relevance as an exception to (or disclosure for purposes of) such other representation, warranty or covenant is reasonably apparent on its face) or in the Acquiror SEC Reports filed or furnished by Acquiror on or before the date of this Agreement (excluding (i) any disclosures in such Acquiror SEC Reports under the headings “Risk Factors” or “Forward-Looking Statements” and other disclosures that are predictive, cautionary or forward looking in nature and (ii) any exhibits or other documents appended thereto), each of Acquiror and Merger Sub, jointly and severally, represents and warrants to the Company as follows:

#### Section 5.01 Organization, Standing and Corporate Power.

(a) Each of Acquiror and Merger Sub is a corporation duly incorporated, validly existing and in good standing under the Laws of its jurisdiction of formation and has all requisite corporate power and authority to carry on its business as now being conducted. Merger Sub has no assets or operations other than those required to effect the Transactions contemplated hereby. Acquiror is duly qualified or licensed to do business and is in good standing in each jurisdiction in which the conduct of its business or the ownership, leasing or operation of its properties makes such qualification or licensing necessary, except as would not have an Acquiror Material Adverse Effect.

(b) Merger Sub is a corporation duly organized, validly existing and in good standing under the Law of the State of Delaware, with full corporate power and authority to enter into this Agreement and perform its obligations hereunder. Other than Merger Sub and Molecule Sub, Acquiror has no other Subsidiaries or any equity or other interests in any other Person.

(c) Acquiror has provided to the Company a true, complete and correct copy of the Acquiror Organizational Documents and the certificate of incorporation and bylaws of Merger Sub and there are no other Contracts which would amend, supplement or relate to the subject matters described in the Acquiror Organizational Documents or the certificate of incorporation and bylaws of Merger Sub, provided however, that the Acquiror will file the Charter Amendment with the Secretary of State of the State of Delaware to amend the Acquiror Charter to implement the Reverse Stock Split in accordance with Section 3.04.

(d) There are no outstanding powers of attorney executed on behalf of Acquiror or Merger Sub.

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Section 5.02 Corporate Authority; Approval; Non-Contravention; Government Approvals.

(a) Each of Acquiror and Merger Sub has the requisite corporate power and authority and has taken all corporate action necessary in order to execute, deliver and perform its obligations under this Agreement, and subject to satisfaction of the conditions to Closing contemplated hereby, to consummate the Transactions. The execution, delivery and performance by Acquiror and Merger Sub of this Agreement and the consummation by it of the Transactions, have been duly and validly authorized by all necessary corporate consent and authorizations on the part of Acquiror and Merger Sub. This Agreement has been duly executed and delivered by Acquiror and Merger Sub and, assuming due authorization, execution and delivery hereof by the other parties, is a legal, valid and binding obligation of Acquiror and Merger Sub, enforceable against Acquiror and Merger Sub in accordance with its terms (subject to the Enforceability Exceptions).

(b) The execution, delivery and performance of this Agreement and the consummation of the Transactions do not, and will not, constitute or result in (i) a breach or violation of, or a default under, the Acquiror Organizational Documents or any organizational documents of Merger Sub or (ii) with or without notice, lapse of time or both, a breach or violation of, a termination (or right of termination) of or default under, the creation or acceleration of any obligations under or the creation of a Lien on any of the assets of Acquiror or Merger Sub pursuant to, any Contract to which Acquiror or Merger Sub is a party or, assuming compliance with the matters referred to in Section 5.02(a), under any Law to which Acquiror or Merger Sub is subject, except (in the case of clause (ii) above) for such violations, breaches or defaults which has not had or would not, individually or in the aggregate, be expected to materially impair, delay or prohibit the ability of Acquiror or Merger Sub to enter into, perform its obligations under this Agreement and consummate the Transactions.

(c) No consent of, or registration, declaration, notice or filing with, any Governmental Authority is required by or with respect to Acquiror or Merger Sub in connection with the execution and delivery by Acquiror or Merger Sub of this Agreement or the consummation of the Transactions contemplated by this Agreement, except for (i) the filing with the SEC of (A) the Proxy Statement and (B) such reports under Section 13(a) or 15(d) of the Exchange Act as may be required in connection with this Agreement or the transactions contemplated hereby, (ii) filing of the Certificate of Designation, (iii) filing of the Charter Amendment, (iv) filing of the Certificate of Merger or (v) such other consents, registrations, declarations, notices and filings which, if not obtained or made, would not have an Acquiror Material Adverse Effect.

Section 5.03 Compliance with Laws. Acquiror and Merger Sub are, and since their respective dates of incorporation, have been, operating in all material respects in a manner that is customary for businesses similar to Acquiror and Merger Sub and as described in the Acquiror SEC Reports, and each of Acquiror and Merger Sub is conducting and, since their respective dates of incorporation, has conducted its business in material compliance with all Laws, and to the Knowledge of Acquiror, no notices have been received by either Acquiror or Merger Sub from any Governmental Authority or any other Person alleging an uncured material violation of any Law.

Section 5.04 Employee Benefit Plan. Except as set forth on Schedule 5.04 of the Acquiror Disclosure Schedules, neither Acquiror nor Merger Sub maintains or contributes to any Benefit Plan. Neither the execution and delivery of this Agreement nor the consummation of the transactions contemplated by this Agreement (either alone or in combination with another event) will (i) result in any payment (including severance, unemployment compensation, golden parachute, bonus or otherwise) becoming due to any shareholder, stockholder, director, officer or employee of Acquiror or Merger Sub, or (ii) result in the acceleration, vesting or creation of any rights of any shareholder, director, officer or employee of Acquiror or Merger Sub to payments or benefits or increases in any existing payments or benefits or any loan forgiveness.

Section 5.05 Indebtedness. As of the date hereof, Acquiror does not have, or have any present intention, agreement, arrangement or understanding to enter into or incur, any obligations with respect to or under any Indebtedness.

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Section 5.06 Taxes.

(a) Each of Acquiror and Merger Sub is and has at all times since its date of formation been, treated as a corporation for U.S. federal income tax purposes.

(b) Each of Acquiror and Merger Sub has timely filed with the appropriate Tax Authority, or has caused to be timely filed on its behalf (taking into account any valid extension of time within which to file), all material Tax Returns required to be filed by it, and all such Tax Returns were and are true, correct and complete in all material respects and were prepared in compliance in all material respects with all applicable Laws. Each of Acquiror and Merger Sub has timely paid all material amounts of Taxes due and payable (whether or not shown on any Tax Return), other than Taxes being contested in good faith and for which adequate reserves have been established in accordance with GAAP.

(c) Each of Acquiror and Merger Sub, as applicable, has complied in all material respects with all applicable Laws relating to the payment and withholding of Taxes and Tax information reporting, collection and retention and has, within the time and in the manner prescribed by applicable Laws, (i) withheld all material amounts of Taxes required to have been withheld by it in connection with amounts paid to any employee, independent contractor, creditor, stockholder or any other third party, and (ii) timely remitted such amounts required to have been remitted to the appropriate Tax Authority.

(d) No claim, assessment, deficiency or proposed adjustment for any Tax has been asserted or assessed by any Tax Authority against Acquiror or Merger Sub that remains unresolved or unpaid except for claims, assessments, deficiencies or proposed adjustments being contested in good faith and for which adequate reserves have been established in accordance with GAAP.

(e) There is no Tax audit, examination or other Action of Acquiror or Merger Sub presently in progress, and there are no waivers, extensions or requests for any waivers or extensions of any statute of limitations currently in effect with respect to any material Taxes of Acquiror or Merger Sub.

(f) Neither Acquiror nor Merger Sub is or has been (i) a party to any Tax sharing, indemnification, allocation or similar agreement or arrangement (excluding any commercial contract entered into in the ordinary course of business and not primarily related to Taxes), (ii) a member of an affiliated, consolidated, combined, unitary or similar Tax group (other than any such Tax group the common parent of which was the Company), or (iii) a party to any "listed transaction" under Treasury Regulations Section 1.6011-4(b)(2) (or any similar or corresponding provision of U.S. state or local or non-U.S. Law).

(g) Acquiror and Merger Sub do not have any liability for Taxes of any other Person as a result of Treasury Regulations Section 1.1502-6 (or any similar provision of U.S. state or local or non-U.S. Law), as a transferee or successor, or by operation of Law.

(h) Acquiror and Merger Sub will not be required to include any material item of income in, or exclude any material deduction from, taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of any: (i) change in method of accounting, or use of an improper method of accounting, for a taxable period (or portion thereof) ending on or prior to the Closing Date; (ii) "closing agreement" as described in Section 7121 of the Code (or any corresponding or similar provision of U.S. state or local or non-U.S. Law) executed on or prior to the Closing Date; (iii) installment sale or open transaction disposition made on or prior to the Closing Date; (iv) prepaid amount received or deferred revenue accrued on or prior to the Closing Date outside of the ordinary course of business; or (v) intercompany item under Treasury Regulation Section 1.1502-13 (or any corresponding or similar provision of U.S. state or local or non-U.S. Law) or excess loss account under Treasury Regulation Section 1.1502-19 (or any corresponding or similar provision of U.S. state or local or non-U.S. Law).

(i) There are no Liens for Taxes on any assets of either Acquiror or Merger Sub other than Permitted Liens.

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(j) No written claims have ever been made by any Tax Authority in a jurisdiction where Acquiror and Merger Sub do not file Tax Returns that the Company is or may be subject to taxation by that jurisdiction, which claims have not been resolved or withdrawn.

(k) Neither Acquiror or Merger Sub has been either a "distributing corporation" or a "controlled corporation" within the respective meanings of such terms under Code Section 355(a)(1)(A) in a distribution of stock qualifying under Code Section 355 (i) in the two years before the date of this Agreement or (ii) in a distribution that could otherwise constitute part of a "plan" or "series of related transactions" within the meaning of Code Section 355(e) in conjunction with the Transactions.

(l) The Acquiror is not and has never been a "United States real property holding corporation" within the meaning of Code Section 897(c)(2).

(m) The Merger Sub has been formed solely for the purpose of effecting the transactions contemplated under this Agreement and has not engaged in any activity other than activity consistent with this purpose.

(n) Neither Acquiror nor Merger Sub has taken or agreed to take any action not contemplated by this Agreement that would reasonably be expected to prevent the Transactions from qualifying for the Intended Tax Treatment.

(o) To the Knowledge of Acquiror, no facts or circumstances exist that would reasonably be expected to prevent the Transactions from qualifying for the Intended Tax Treatment.

(p) Acquiror is not an "investment company" as defined in Section 368(a)(2)(F)(iii) and (iv) of the Code.

(q) Following the Closing, Acquiror intends to continue the historic business of the Company or to use a significant portion of the Company's business assets in a business, in each case within the meaning of Treasury Regulations Section 1.368-1(d).

(r) The Acquiror Preferred Stock to be issued as Merger Consideration constitutes "stock" of the Acquiror for purposes of Section 368(a) of the Code and qualifies as "voting stock" within the meaning of Section 368(a)(1)(B) of the Code to the extent required for the Merger to qualify as a reorganization under Section 368(a), and constitutes "stock" within the meaning of Section 351(a) of the Code to the extent the Merger and the PIPE Offering are treated as an integrated transaction qualifying under Section 351(a).

(s) Neither Acquiror nor Merger Sub has any plan or intention, as of the date of this Agreement, to, following the Closing: (i) reacquire any of the Acquiror Preferred Stock (or shares of Acquiror Common Stock issued or issuable upon conversion of Acquiror Preferred Stock) issued as Merger Consideration or issued to PIPE investors pursuant to the PIPE Offering; (ii) liquidate the Surviving Corporation; (iii) merge the Surviving Corporation with or into any other Person or cause the Surviving Corporation to merge with or into any other Person; (iv) sell or otherwise dispose of the stock of the Surviving Corporation; or (v) cause the Surviving Corporation to sell or otherwise dispose of any of its assets or properties, except in each case (A) in the ordinary course of business or (B) for assets that Acquiror reasonably determines to be obsolete or to be no longer useful in the business of the Surviving Corporation; in each case of (i) through (v), in a manner that would cause the Merger to fail to qualify for the Intended Tax Treatment.

(t) Immediately following the Effective Time, assuming the Merger and the PIPE Offering are treated as an integrated transaction for purposes of Section 351(a) of the Code, the transferors of property to Acquiror in the Merger and the PIPE Offering taken together will be in "control" of Acquiror within the meaning of Section 368(c) of the Code (i.e., will own at least eighty percent (80%) of the total combined voting power of all classes of Acquiror stock entitled to vote and at least eighty percent (80%) of the total number of shares of all other classes of Acquiror stock). Acquiror shall not issue any shares of Acquiror stock (other than shares issued as Merger Consideration and shares issued pursuant to the PIPE Offering) between the date hereof and the Effective Time in a manner that would cause the transferors in the integrated Merger and PIPE Offering transaction to fail to satisfy the control requirement of Section 368(c) of the Code.

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(u) The transfer of Acquiror's pre-Closing assets and liabilities to Legacy Sub pursuant to Section 7.06(a) shall be structured and effected in a manner that does not adversely affect the qualification of the Merger for the Intended Tax Treatment, including by not causing a violation of the continuity of business enterprise requirement under Treasury Regulations Section 1.368-1(d) or causing any other disqualification of the Merger under Section 368(a) of the Code. Following the Closing, the Surviving Corporation shall continue the historic business of the Company, or shall use a significant portion of the Company's historic business assets in a business, within the meaning of Treasury Regulations Section 1.368-1(d), and the transfer of assets to Legacy Sub shall not impair such continuity.

(v) The warrants to be issued to PIPE investors pursuant to the PIPE Offering with 50% warrant coverage shall not be issued to, or for the benefit of, any holder of Existing Company Common Stock and shall not constitute consideration paid to any holder of Existing Company Common Stock in connection with the Merger. No portion of the PIPE Offering proceeds, and no warrants issued pursuant to the PIPE Offering, shall be distributed or paid, directly or indirectly, to any holder of Existing Company Common Stock in connection with the Transactions.

Section 5.07 Brokers. No broker, investment banker, financial advisor or other Person, other than those set out in Schedule 5.07 of the Acquiror Disclosure Schedules, the fees and expenses of which will be paid by Acquiror or Merger Sub pursuant to an engagement letter entered into therewith, is entitled to any broker's, finder's, financial advisor's or other similar fee or commission in connection with the Transactions based upon arrangements made by or on behalf of Acquiror, Merger Sub or any of their Affiliates.

#### Section 5.08 Acquiror SEC Reports; Financial Statements; Sarbanes-Oxley Act.

(a) Acquiror has filed or furnished in a timely manner all required registration statements, reports, schedules, forms, statements and other documents required to be filed or furnished by it with the SEC since January 1, 2025, pursuant to the Exchange Act or the Securities Act (collectively, as they have been amended since the time of their filing and including all exhibits thereto, the "Acquiror SEC Reports"). The Acquiror SEC Reports are publicly available. The Acquiror SEC Reports were prepared in accordance with the requirements of applicable securities Laws and do not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein not misleading. Acquiror maintains internal controls sufficient to provide reasonable assurance regarding the reliability of financial reporting. The audited financial statements and unaudited interim financial statements (including, in each case, the notes and schedules thereto) included in the Acquiror SEC Reports (collectively, the "Acquiror Financial Statements") complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto, were prepared in accordance with GAAP applied on a consistent basis during the periods involved (except as may be indicated therein or in the notes thereto and except with respect to unaudited statements as permitted by Form 10-Q of the SEC), fairly present (subject, in the case of the unaudited interim financial statements included therein, to normal year-end adjustments and the absence of complete footnotes) in all material respects the financial position of Acquiror as of the respective dates thereof and the results of their operations and cash flows for the respective periods then ended, and are consistent in all material respects with the books and records of Acquiror.

(b) Acquiror has established and maintains disclosure controls and procedures (as defined in Rule 13a-15 under the Exchange Act). Such disclosure controls and procedures are designed to ensure that material information relating to Acquiror and other material information required to be disclosed by Acquiror in the reports and other documents that it files or furnishes under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that all such material information is accumulated and communicated to Acquiror's management, including its principal executive officer and its principal financial officer as appropriate to allow timely decisions regarding required disclosure and to make the certifications required pursuant to Sections 302 and 906 of the Sarbanes-Oxley Act. Such disclosure controls and procedures are effective in timely alerting Acquiror's principal executive officer and principal financial officer to material information required to be included in Acquiror's periodic reports required under the Exchange Act.

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(c) Except as may be disclosed in the Acquiror SEC Reports, Acquiror has established and maintained a system of internal control over financial reporting (as defined in Rule 13a-15 under the Exchange Act). Such internal control over financial reporting is sufficient to provide reasonable assurance regarding the reliability of Acquiror's financial reporting and the preparation of Acquiror's financial statements for external purposes in accordance with GAAP.

(d) As of the date hereof, there are no outstanding comments from the SEC with respect to the Acquiror SEC Reports. To the Knowledge of Acquiror, none of the Acquiror SEC Reports filed on or prior to the date hereof is subject to ongoing SEC review or investigation as of the date hereof.

#### Section 5.09 Business Activities; Absence of Changes.

(a) There is no agreement, commitment or Governmental Order binding upon Acquiror or to which Acquiror is a party which has had or would reasonably be expected to have the effect of prohibiting or impairing any business practice of Acquiror or any acquisition of property by Acquiror or the conduct of business by Acquiror as currently conducted or as contemplated to be conducted as of the Closing other than such effects, individually or in the aggregate, which have not had an Acquiror Material Adverse Effect on the ability of Acquiror or Merger Sub to enter into, perform its obligations under this Agreement and consummate the Transactions.

(b) Other than Merger Sub, Acquiror does not own or have a right to acquire, directly or indirectly, any interest or investment (whether equity or debt) in any corporation, partnership, joint venture, business, trust or other entity. At all times from inception through the date of this Agreement, the business and operations of Acquiror have been conducted exclusively through Acquiror.

(c) There is no liability, debt or obligation against Acquiror or Merger Sub, except for (i) liabilities and obligations reflected or reserved for on Acquiror's audited consolidated balance sheet as of December 31, 2025, or disclosed in the notes thereto, or (ii) that have arisen since the date of Acquiror's audited consolidated balance sheet as of December 31, 2025, in the ordinary course of the operation of business of the Acquiror and Merger Sub and disclosed in Schedule 5.09(c). Acquiror is not a party to, or has any commitment to become a party to, any joint venture, off balance sheet partnership or any similar contract or arrangement (including any contract or arrangement relating to any transaction or relationship between or among the Parent, on the one hand, and any unconsolidated affiliate, including any structured finance, special purpose or limited purpose entity or person, on the other hand, or any "off balance sheet arrangements" (as described in Item 303 of Regulation S-K under the Exchange Act)), where the result, purpose or intended effect of such contract is to avoid disclosure of any material transaction involving, or material liabilities of, Acquiror's published financial statements or other Acquiror SEC Reports.

(d) Since its organization, Merger Sub has not conducted any business activities other than activities directed toward the accomplishment of the Merger. Except as set forth in Merger Sub's organizational documents, there is no agreement, commitment, or Governmental Order binding upon Merger Sub or to which Merger Sub is a party which has had or would reasonably be expected to have the effect of prohibiting or impairing any business practice of Merger Sub or any acquisition of property by Merger Sub or the conduct of business by Merger Sub as currently conducted or as contemplated to be conducted as of the Closing other than such effects which have not had and would not reasonably be expected to have an Acquiror Material Adverse Effect.

(e) Merger Sub does not own or have a right to acquire, directly or indirectly, any interest or investment (whether equity or debt) in any corporation, partnership, joint venture, business, trust or other entity.

(f) Merger Sub was formed solely for the purpose of effecting the Merger and has not engaged in any business activities or conducted any operations other than in connection with the Merger and has no, and at all times prior to the Effective Time except as contemplated by this Agreement, will have no, assets, liabilities or obligations of any kind or nature whatsoever other than those incident to its formation.

(g) (i) Since the date of Acquiror's incorporation, there has not been any change, development, condition, occurrence, event or effect relating to the Acquiror or Merger Sub that, individually or in the aggregate, resulted in, or would reasonably be expected to result in, an Acquiror Material Adverse Effect and (ii) from December 31, 2025, through the date of this Agreement, Acquiror and Merger Sub have not taken any action that would require the consent of the Company if such action had been taken after the date hereof.

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(h) Acquiror is not and has never been a shell company and/or "blank check company" as such term is defined by Rule 419 of the Securities Act.

#### Section 5.10 Data Protection; Data Privacy.

(a) The Acquiror has not received any written requests, complaints or objections to its collection or use of Personal Information from any data protection authority or third party (including data subjects) that remains unresolved that has resulted in, or is reasonably likely to result in, material liability to the Acquiror, taken as a whole. No individual has been awarded compensation from the Acquiror under any Privacy Laws, and no written claim for such compensation is outstanding.

(b) The Acquiror does not sell, rent or otherwise make available to any Person any Personal Information, except in a manner that complies in all material respects with all applicable Privacy Laws. The execution, delivery and performance of this Agreement and the transactions contemplated hereby (including any transfers of or access to Personal Information in connection therewith) comply, and will comply, in all material respects, with all Privacy Laws and other contractual commitments related to the privacy and security of Personal Information to which the Acquiror is bound, except as would not be material and adverse to the Acquiror, taken as a whole.

#### Section 5.11 Information Technology.

(a) The IT Systems: (i) operate and perform in material accordance with the requirements of the Acquiror for the operation of its business as currently conducted and are sufficient for the operation of the business as currently conducted and (ii) are free from bugs and other defects, except for defects that have not resulted in, and would not reasonably be expected to result in, material disruption to the business of the Acquiror.

(b) The Acquiror has taken and is taking reasonable and appropriate technical and organizational measures to protect the confidentiality, integrity and security of the IT Systems used in the operation of the business of the Acquiror from any unauthorized use, access, interruption, or modification. Such IT Systems are sufficient for the operation of the business of the Acquiror as currently conducted, including as to capacity, scalability and ability to process current and anticipated peak volumes in a timely manner. The IT Systems include a sufficient number of license seats for all Software licensed by the Acquiror from third parties as necessary for the usage of such Software in the operation of the business of the Acquiror as currently conducted and in compliance with the applicable license terms.

Section 5.12 Litigation. Except as set forth in the Acquiror SEC Reports, as of the date of this Agreement, there are no Actions pending or, to the Knowledge of the Acquiror, threatened against the Acquiror, any director, officer or employee of the Acquiror (in their capacity as such), or that would reasonably be expected to prevent or materially delay the consummation of the Merger. There are no Actions pending or threatened by Acquiror against any other Person.

Section 5.13 No Outside Reliance. Notwithstanding anything contained in this Article V or any other provision hereof, Acquiror and its Affiliates acknowledge and agree that Acquiror has made its own investigation of the Company and that neither the Company nor any of its Affiliates or any of their respective directors, officers, employees, stockholders, partners, members, agents or Representatives is making any representation or warranty whatsoever, express or implied, beyond those expressly given by the Company in Article IV, including any implied warranty or representation as to condition, merchantability, suitability or fitness for a particular purpose or trade as to any of the assets of the Company.

#### Section 5.14 Capitalization.

(a) As of the date hereof, the authorized capital stock of Acquiror consists of (i) 100,000,000 shares of Acquiror Common Stock, of which 5,591,290 shares of Acquiror Common Stock are issued and outstanding as of the date of this Agreement and (ii) 20,000,000 preferred shares of Acquiror, par value \$0.00001, and no preferred shares are issued and outstanding as of the date of this Agreement (the “Outstanding Preferred Stock”). All of the issued and outstanding shares of Acquiror Common Stock and Outstanding Preferred Stock (1) have been duly authorized and validly issued and are fully paid and non-assessable, (2) were issued in compliance in all material respects with applicable Law, (3) were not issued in breach or violation of any preemptive rights or Contract and (4) are fully vested and not otherwise subject to a substantial risk of forfeiture within the meaning of Code Section 83.

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(b) Except for this Agreement and except as disclosed in Schedule 5.13(b)(i) of the Acquiror Disclosure Schedules, there are (i) no subscriptions, calls, options, warrants, rights or other securities convertible into or exchangeable or exercisable for Acquiror Common Stock or the equity interests of Acquiror, or any other Contracts to which Acquiror is a party or by which Acquiror is bound obligating Acquiror to issue or sell any shares of capital stock of, other equity interests in or debt securities of, Acquiror, and (ii) no equity equivalents, stock appreciation rights, phantom stock ownership interests or similar rights in Acquiror. Except as disclosed in Schedule 5.13(b)(ii) of the Acquiror Disclosure Schedules, there are no outstanding contractual obligations of Acquiror to repurchase, redeem or otherwise acquire any securities or equity interests of Acquiror. There are no outstanding bonds, debentures, notes or other indebtedness of Acquiror having the right to vote (or convertible into, or exchangeable for, securities having the right to vote) on any matter for which Acquiror Stockholders may vote. Except as disclosed in Schedule 5.13(b)(iii) of the Acquiror Disclosure Schedules, Acquiror is not a party to any stockholders agreement, voting agreement or registration rights agreement relating to Acquiror Common Stock or any other equity interests of Acquiror. Other than Merger Sub, Acquiror does not own any capital stock or any other equity interests in any other Person or has any right, option, warrant, conversion right, stock appreciation right, redemption right, repurchase right, agreement, arrangement or commitment of any character under which a Person is or may become obligated to issue or sell, or give any right to subscribe for or acquire, or in any way dispose of, any shares of the capital stock or other equity interests, or any securities or obligations exercisable or exchangeable for or convertible into any shares of the capital stock or other equity interests, of such Person. There are no securities or instruments issued by or to which the Acquiror is a party containing anti-dilution or similar provisions that will be triggered by the consummation of the transactions contemplated by this Agreement that have not been or will not be waived on or prior to the Closing Date.

(c) All of the issued and outstanding Equity Securities of Merger Sub are held by Acquiror as of the date of this Agreement. All outstanding Equity Securities of such Merger Sub are validly issued, fully paid and non-assessable, and are not subject to preemptive rights or any other Liens (other than Liens arising pursuant to applicable Securities Laws).

Section 5.15 Nasdaq Quotation. The issued and outstanding shares of Acquiror Common Stock are registered pursuant to Section 12(b) of the Exchange Act and are listed for trading on Nasdaq under the symbol “SHPH.” Except as disclosed in Schedule 5.14 of the Acquiror Disclosure Schedules, Acquiror is in compliance in all material respects with the rules of the Nasdaq and there is no action or proceeding pending or, to the Knowledge of Acquiror, threatened against Acquiror by Nasdaq, the Financial Industry Regulatory Authority or the SEC with respect to any intention by such entity to deregister the Acquiror Common Stock or terminate the listing of Acquiror Common Stock on Nasdaq. None of Acquiror or its Affiliates has taken any action in an attempt to terminate the registration of the Acquiror Common Stock under the Exchange Act except as contemplated by this Agreement.

Section 5.16 Affiliate Agreements. Except as disclosed in the Acquiror SEC Reports, neither of the Acquiror nor Merger Sub is a party to any transaction, agreement, arrangement or understanding with any (a) present or former executive officer or director of either of the Acquiror or Merger Sub, (b) beneficial owner (within the meaning of Section 13(d) of the Exchange Act) of five (5%) percent or more of the capital stock or equity interests of Acquiror or (c) Affiliate, “associate” or member of the “immediate family” (as such terms are respectively defined in Rules 12b-2 and 16a-1 of the Exchange Act) of any of the foregoing.

#### Section 5.17 Anti-Bribery; Economic Sanctions.

(a) Since their respective dates of incorporation, Acquiror and Merger Sub have complied with all applicable Anti-Bribery Laws. Since their respective dates of incorporation, neither Acquiror nor Merger Sub, nor to the Knowledge of the Acquiror, any of their respective Representatives, have directly or indirectly paid, offered or promised to pay, or authorized or ratified the payment, directly or indirectly, of any monies or anything of value to any Public Official for the purpose of influencing any act or decision of such official or of any Governmental Authority to obtain or retain business, or direct business to any person or to secure any other improper benefit or advantage.

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(b) Neither Acquiror nor Merger Sub are Sanctioned Persons or located, organized, or ordinarily reside in an Embargoed Jurisdiction.

(c) Acquiror and Merger Sub maintain in effect written policies, procedures and internal controls, including an internal controls system, that are reasonably designed to promote compliance with applicable International Trade Laws and Anti-Bribery Laws.

#### Section 5.18 Labor and Employment.

(a) Except as set forth on Schedule 5.17(a) of the Acquiror Disclosure Schedules, (i) there are no material Actions pending or, to the knowledge of the Acquiror, threatened in writing against the Acquiror alleging violations of any Law pertaining to labor relations or employment matters, by any of their respective current or former employees, which Actions would be material to the Acquiror, taken as a whole; (ii) the Acquiror is not, nor has the Acquiror been for the past two (2) years, a party to, bound by, or negotiating any collective bargaining agreement or other contract with a union, works council or labor organization applicable to persons employed by the Acquiror, nor, to the knowledge of the Acquiror, is there a union organizing campaign in progress with respect to any such employees; (iii) there are no unfair labor practice complaints pending against the Acquiror before any Governmental Authority; and (iv) for the past two (2) years there has not been, nor, to the knowledge of the Acquiror, has there been threatened in writing, any strike, slowdown, work stoppage, lockout, concerted refusal to work overtime or other material labor dispute affecting any employees of the Acquiror.

(b) The Acquiror is, and for the last two (2) years has been, in compliance in all material respects with all applicable Laws relating to the employment, employment practices, employment discrimination, terms and conditions of employment, mass layoffs and plant closings (including the Worker Adjustment and Retraining Notification Act of 1988, as amended, or any similar Laws), immigration, meal and rest breaks, pay equity, workers’ compensation, family and medical leave, and occupational safety and health requirements, including those related to wages, hours, collective bargaining and the payment and withholding of Taxes and other sums as required by the appropriate Governmental Authority and are not liable for any arrears of wages, Taxes, penalties or other sums for failure to comply with any of the foregoing.

(c) To the Knowledge of the Acquiror, no current or former employee or independent contractor of the Acquiror is in any material respect in violation of any term of any employment agreement, nondisclosure agreement, common law nondisclosure obligation, fiduciary duty, noncompetition agreement, non-solicitation agreement, restrictive covenant or other obligation: (i) owed to the Acquiror; or (ii) owed to any third party with respect to such Person’s right to be employed or engaged by the Acquiror. To the Knowledge of the Acquiror, no current employee of the Acquiror with annualized base compensation at or above \$250,000, has given notice to the Acquiror that the employee intends to terminate his or her employment prior to the one year anniversary of the Closing.

(d) The Acquiror has promptly, thoroughly and impartially investigated all sexual harassment, or other unlawful discrimination or unlawful retaliation, complaints made by or against employees of the Acquiror, in each case in connection with their employment with the Acquiror, of which it has been made aware in the past two (2) years. With respect to each such complaint to the extent warranted based on the Acquiror’s investigation, the Acquiror has taken prompt corrective action that is reasonably calculated to prevent further improper action. The Acquiror does not reasonably expect any material liabilities with respect to any such complaints and, to the Knowledge of the Acquiror, there are no such complaints relating to officers, directors, employees, contractors, or agents of the Acquiror relating to their employment with or service to the Acquiror, that, if known to the public, would bring the Acquiror into material disrepute.

(e) Except as would not result in material liability for the Acquiror, in the past two (2) years the Acquiror has fully and timely paid all (i) wages, salaries, wage premiums, commissions, overtime, bonuses, severance and termination payments, fees, and other compensation that has come due and payable to its current or former employees and independent contractors under applicable Laws, Contract or Acquiror policy, and (ii) fines, Taxes, interest, or other penalties for any failure to pay or delinquency in paying such compensation.

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Section 5.19 No Other Representations or Warranties. The representations and warranties made by Acquiror and Merger Sub in this Article V are the exclusive representations and warranties made by Acquiror and Merger Sub in connection with this Agreement and the Transactions. Except for the representations and warranties contained in this Article V, neither Acquiror nor Merger Sub, nor any other Person, has made or makes any other express or implied representation or warranty, either written or oral, on behalf of Acquiror or Merger Sub, to the accuracy or completeness of any information regarding Acquiror or Merger Sub available to the other parties or their respective Representatives and expressly disclaims any such other representations or warranties. The Company acknowledges and agrees that it is not relying on any representation or warranty of Acquiror, Merger Sub or any other Person other than the representations and warranties expressly set forth in this Agreement. Without limiting the foregoing, the Company acknowledges and agrees that neither Acquiror nor Merger Sub nor any other Person makes or has made any representation or warranty with respect to any financial projections, forecasts, estimates, budgets or prospective information, or with respect to any information, materials or analyses (including any management presentations, “data room” materials or diligence materials) made available in connection with the negotiation or consummation of the Transactions. Notwithstanding the foregoing,

nothing in this Agreement (including this Section 5.19) shall limit or restrict (i) any liability for fraud with respect to the making of the representations and warranties expressly set forth in this Agreement, or (ii) any rights or obligations arising under applicable federal securities Laws.

## ARTICLE VI

### COVENANTS OF THE COMPANY

#### Section 6.01 Financial Statements; Stockholder Approval; Other Actions.

(a) As promptly as reasonably practicable following the date hereof, and in no event later than 75 days from the Closing, the Company shall deliver to Acquiror any audited consolidated balance sheets and the related audited consolidated statements of operations and comprehensive loss, and stockholders' deficit and cash flows of the Company as of and for a year-to-date period ended as of the end of any other different fiscal quarter (and as of and for the same period from the previous fiscal year) or fiscal year (and as of and for the prior fiscal quarter), as applicable that is required to be included in the Proxy Statement or any other filing required by applicable Law. All such financial statements, together with any audited consolidated balance sheet and the related audited consolidated statements of operations and comprehensive loss, and stockholders' deficit and cash flows of the Company as of and for a year-to-date period ended as of the end of a different fiscal quarter (and as of and for the same period from the previous fiscal year) or fiscal year (and as of and for the prior fiscal quarter) that is required to be included in the Proxy Statement or any other filing required by applicable Law (A) will fairly present in all material respects the financial position of the Company as of the date thereof, and the results of its operations, stockholders' equity and cash flows for the respective periods then ended, (B) will be prepared in conformity with GAAP applied on a consistent basis during the periods involved (except, in the case of any audited financial statements, as may be indicated in the notes thereto and subject, in the case of any unaudited financial statements, to normal year-end audit adjustments, none of which is expected to be material), (C) in the case of any audited financial statements, will be audited in accordance with the standards of the PCAOB and contain an unqualified report of the Company's auditor and (D) will comply in all respects with the applicable accounting requirements and with the rules and regulations of the SEC, the Exchange Act and the Securities Act in effect as of the respective dates thereof (including Regulation S-X or Regulation S-K, as applicable).

(b) Prior to the execution of this Agreement, the Company shall have obtained the requisite approval of the Company Board and its stockholders, by written consent (the "Company Stockholder Approval"), approving the entry by the Company into this Agreement and the consummation of the Transactions.

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## ARTICLE VII

### COVENANTS OF ACQUIROR

Section 7.01 Access and Information. From and after the Closing until the Conversion Effective Time (the "Interim Period"), Acquiror will give, and will cause its Representatives to give, the Company, at reasonable times during normal business hours and upon reasonable intervals and notice, reasonable access to all offices and other facilities and to appropriate employees, properties, Contracts, agreements, commitments, books and records, financial and operating data and other information (including Tax Returns, internal working papers, client files, client Contracts and director service agreements), of or pertaining to Acquiror, as the Company or its Representatives may reasonably request regarding Acquiror, and its respective business, assets, liabilities, financial condition, prospects, operations, management, employees and other aspects (including unaudited quarterly financial statements, including a consolidated quarterly balance sheet and income statement, a copy of each material report, schedule and other document filed with or received by a Governmental Authority under the requirements of applicable securities Laws, and independent public accountants' work papers (subject to the consent or any other conditions required by such accountants, if any)) and cause each of Acquiror's Representatives to reasonably cooperate with the Company and its Representatives in their investigation; *provided, however*, that the Company and its Representatives will conduct any such activities in such a manner as not to unreasonably interfere with the business or operations of Acquiror and Acquiror will not be required to provide information it reasonably determines that it cannot provide as a matter of Law, Contract, or protection of attorney-client or similar privilege. No information or knowledge obtained by the Company in any investigation conducted under the access contemplated by this Section 7.01 will affect or be deemed to modify any representation or warranty of Acquiror set forth in this Agreement or otherwise impair the rights and remedies available to the Company.

#### Section 7.02 Indemnification and Insurance.

(a) From and after the Effective Time, Acquiror shall indemnify and hold harmless each present and former director or officer of the Company, and each present director or officer of Acquiror, against any costs or expenses (including reasonable attorneys' fees), judgments, fines, losses, claims, damages or liabilities incurred in connection with any Action, whether civil, criminal, administrative or investigative, arising out of or pertaining to matters existing or occurring at or prior to the Effective Time, whether asserted or claimed prior to, at or after the Effective Time, to the fullest extent that Acquiror would have been permitted under applicable Law or Acquiror Organizational Documents and indemnification agreements (or Contracts containing similar indemnification provisions) in effect on the date of this Agreement to indemnify such Person (and advance expenses as incurred in defense of any Action to the fullest extent permitted under applicable Law). Without limiting the foregoing, Acquiror shall, for a period of not less than six years from the Effective Time, (i) maintain provisions in its certificate of incorporation, bylaws, other organization documents and indemnification agreements (or Contracts containing similar indemnification provisions), to the extent applicable, concerning the indemnification and exculpation (and provisions relating to expense advancement) of officers and directors that are no less favorable to those Persons than the provisions of the Acquiror Organizational Documents, and such indemnification agreements (or Contracts containing similar indemnification provisions), to the extent applicable, as of the date of this Agreement and (ii) not amend, repeal, terminate or otherwise modify such provisions in any respect that would adversely affect the rights of those Persons thereunder, in each case, except as required by Law.

(b) For a period of six years from the Effective Time, Acquiror shall maintain in effect directors' and officers' liability insurance covering those Persons referred to in Section 7.02(a) on terms not less favorable than the current terms of Acquiror's directors' and officers' liability insurance policies (true, correct and complete copies of which have been heretofore made available to the Company or its agents or Representatives); *provided, however*, that (i) Acquiror may cause coverage to be extended under Acquiror's current directors' and officers' liability insurance by obtaining a six-year "tail" policy containing terms not materially less favorable than the terms of such current insurance coverage with respect to claims existing or occurring at or prior to the Effective Time, provided that (A) in no event shall Acquiror be required to expend on the premium thereof in excess of 150% of the aggregate annual premiums currently payable by the Company or Acquiror, as applicable, with respect to such current policy (the "Premium Cap"), and (B) if such minimum coverage under any such "tail" policy is or becomes not available at the Premium Cap, then any such tail policy shall contain the maximum coverage available at the Premium Cap; and (ii) if any claim is asserted or made within such six-year period, any insurance required to be maintained under this Section 7.02 shall be continued in respect of such claim until the final disposition thereof.

(c) This Section 7.02 shall survive the consummation of the Merger indefinitely and shall be binding on Acquiror and all successors and assigns of Acquiror. In the event that Acquiror or any of its successors or assigns consolidates with or merges into any other Person and shall not be the continuing or surviving corporation or entity of such consolidation or merger or transfers or conveys all or substantially all of its properties and assets to any Person, then, and in each such case, Acquiror shall ensure that proper provision shall be made so that the successors and assigns of Acquiror shall succeed to the obligations set forth in this Section 7.02. The obligations of Acquiror under this Section 7.02 shall not be terminated or modified in such a manner as to materially and adversely affect any present and former director and officer of the Company or any present director or officer of Acquiror without the consent of the affected Person (it being expressly agreed that the covered directors and officers of the Company and the covered directors and officers of the Acquiror shall be third party beneficiaries of this Section 7.02).

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Section 7.03 Additional Insurance Matters. The Acquiror shall maintain directors' and officers' liability insurance (such insurance to be reasonably acceptable to the Company) that shall be effective as of Closing and will cover those Persons who will be the directors and officers of Acquiror and its Subsidiaries (including the officers of the Company) at and after the Closing on terms customary for a typical directors' and officers' liability insurance policy for a company whose equity is listed on Nasdaq which policy has a scope and amount of coverage that is reasonably appropriate for a company of similar characteristics (including the line of business and revenues) as Acquiror and its Subsidiaries (including the Company).

Section 7.04 Conduct of Business. From the date of this Agreement until the Effective Time, Acquiror shall not take any action the primary purpose of which is to materially delay, impede or prevent the consummation of the Merger or the other Transactions. Nothing in this Agreement shall restrict Acquiror from conducting its business in the ordinary course consistent with past practice or from taking actions required by applicable Law, Nasdaq rules, or its fiduciary duties.

#### Section 7.05 [Reserved].

#### Section 7.06 Legacy Sub; Financing Allocations; Share Issuance.

(a) Promptly following the Closing, and in any event no later than fifteen (15) Business Days following the Closing, Acquiror shall cause all of the assets and liabilities of Acquiror existing immediately prior to the Closing to be transferred to a newly established Subsidiary of Acquiror ("Legacy Sub"), the purpose of which shall be to continue the current business and operations of Acquiror as described in the Acquiror SEC Reports (the "Legacy Business"). All Intellectual Property, know-how, and proprietary information used in the Legacy Business shall be transferred to Legacy Sub.

(b) The Acquiror shall use its reasonable best efforts to consummate the PIPE Offering with 100% warrant coverage, in an aggregate amount of up to \$20,000,000.00, with a minimum initial closing of \$10,000,000.00 to take place no later than the date hereof.

(c) Of the proceeds received from the PIPE Offering, the first \$5,000,000 of gross proceeds shall be deposited into one or more accounts designated by Legacy Sub, with the remaining proceeds, after taking into account the payment of Transaction Expenses, to be deposited into an account designated by the Surviving Corporation.

Section 7.07 Nasdaq Listing Application. If required under applicable Nasdaq rules and regulations, prior to the conversion of Acquiror Preferred Stock, Acquiror shall obtain conditional approval of its listing application from Nasdaq in connection with the Transactions, including any required new listing application due to a change in control or Reverse Merger (as defined in Section 341 of the Nasdaq Company Guide). Immediately prior to the conversion of Acquiror Preferred Stock, Acquiror shall satisfy all applicable continuing listing requirements of Nasdaq (or be granted a grace period therefrom), shall not have received any notice of non-compliance, and the Acquiror Common Stock underlying the Merger Consideration, shall have been approved for listing on Nasdaq.

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## ARTICLE VIII

## JOINT COVENANTS

Section 8.01 Support of Transaction. Without limiting any covenant contained herein, Acquiror and the Company shall each, and Acquiror shall cause Merger Sub to: (i) use commercially reasonable efforts to assemble, prepare and file any information (and, as needed, to supplement such information) as may be reasonably necessary to obtain as promptly as practicable all governmental and regulatory consents required to be obtained in connection with the Transactions, (ii) use commercially reasonable efforts to obtain all material consents and approvals of third parties that any of Acquiror, the Company, or their respective Affiliates are required to obtain in order to consummate the Transactions, including any required approvals of parties to Material Contracts with the Company as specified in Schedule 8.01, and (iii) take such other action as may reasonably be necessary or as another party may reasonably request to comply with this Agreement and to consummate the Transactions as soon as practicable. Notwithstanding the foregoing, in no event shall Acquiror, Merger Sub or the Company be obligated to bear any expense or pay any fee or grant any concession in connection with obtaining any consents, authorizations or approvals pursuant to the terms of any Contract to which the Company is a party or otherwise in connection with the consummation of the Transactions.

### Section 8.02 Preparation of Proxy Statement

(a) As promptly as reasonably practicable following the date of this Agreement, the Acquiror shall prepare and file with the SEC a proxy statement to be sent to the stockholders of the Acquiror relating to an annual or special meeting of the Acquiror Stockholders in connection with the issuance of Acquiror Common Stock underlying the Acquiror Preferred Stock, including any Acquiror Preferred Stock issued pursuant to the PIPE Offering (the "Proxy Statement"), and the Acquiror shall prepare and file with the SEC all other documents to be filed by the Acquiror with the SEC in connection with the Transactions, the PIPE Offering and the other transactions contemplated hereby as required by the Securities Act or the Exchange Act.

(b) The Acquiror covenants and agrees that the Proxy Statement, including any pro forma financial statements included therein (and the letter to stockholders, notice of meeting and form of proxy included therewith), will not, at the time that the Proxy Statement or any amendment or supplement thereto is filed with the SEC or the Proxy Statement is first mailed to the Acquiror Stockholders and at the time of the Acquiror Stockholder Meeting, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The Acquiror shall use commercially reasonable efforts to cause the Proxy Statement to comply with the applicable rules and regulations promulgated by the SEC and to respond promptly to any comments of the SEC or its staff.

(c) The Acquiror shall use its reasonable best efforts to cause the definitive Proxy Statement to be disseminated to the Acquiror Stockholders as promptly as reasonably practicable after the first to occur of (A) confirmation from the SEC that it has no further comments on the preliminary Proxy Statement, (B) confirmation from the SEC that the preliminary Proxy Statement is otherwise not to be reviewed or (C) expiration of the 10-day period after filing the preliminary Proxy Statement in the event the SEC does not review the Proxy Statement.

### Section 8.03 Tax Matters

(a) Transfer Taxes. Except as otherwise set forth in this Agreement, all transfer, documentary, sales, use, stamp, registration, value added or other similar Taxes incurred in connection with the Transactions ("Transfer Taxes") shall be borne 100% by Acquiror. The Company and Acquiror further agree to reasonably cooperate to reduce or eliminate the amount of any such Transfer Taxes.

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(b) Tax Treatment. (i) Intended Tax Treatment. The parties intend that, for United States federal income tax purposes, (A) the Merger shall qualify as a "reorganization" within the meaning of Section 368(a) of the Code (the "Section 368 Treatment"), and this Agreement shall constitute a "plan of reorganization" within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3(a), with each of Acquiror, Merger Sub and the Company being a "party to the reorganization" within the meaning of Treasury Regulations Section 1.368-2(g), or, in the alternative, (B) the Merger and the PIPE Offering shall be treated as an integrated transaction qualifying as a tax-free exchange within the meaning of Section 351(a) of the Code (the "Section 351 Treatment" and, together with the Section 368 Treatment, the "Intended Tax Treatment"). The parties intend the Section 368 Treatment to be the primary characterization of the Transactions for U.S. federal income tax purposes, with the Section 351 Treatment serving as an alternative characterization in the event that the Section 368 Treatment is determined not to apply. The parties shall cooperate to determine, prior to the Closing, which characterization is most supportable based on the facts and applicable Law, and shall report the Transactions consistently with such determination. (ii) Consistent Reporting. The Transactions shall be reported by the parties and their respective Affiliates for all Tax purposes in a manner consistent with the Intended Tax Treatment, and no party shall take any Tax reporting position inconsistent with the Intended Tax Treatment, unless otherwise required by a Tax Authority as a result of a "determination" within the meaning of Section 1313(a) of the Code (or any similar or corresponding provision of applicable Law). Each party shall promptly, and in any event within ten (10) Business Days, notify the other parties in writing upon receipt of any written notice from a Tax Authority that the Intended Tax Treatment is being challenged or that the qualification of the Merger for the Intended Tax Treatment is being questioned. (iii) PIPE Offering Integration. The parties acknowledge that the PIPE Offering and the Merger are part of a single, integrated plan of reorganization and/or exchange. The parties agree to treat the Merger and the PIPE Offering as an integrated transaction for purposes of determining whether the Intended Tax Treatment is achieved. In furtherance of the foregoing: (A) no portion of the PIPE Offering proceeds shall be paid, distributed or otherwise transferred, directly or indirectly, to any holder of Existing Company Common Stock in connection with the Transactions; (B) the warrants issued pursuant to the PIPE Offering shall not be issued to, or for the benefit of, any holder of Existing Company Common Stock; (C) the PIPE investors shall acquire their shares of Acquiror Preferred Stock solely for cash and not in exchange for shares of Existing Company Common Stock; and (D) the parties shall structure and consummate the PIPE Offering and the Merger in a manner intended to satisfy the continuity of interest requirement under Treasury Regulations Section 1.368-1(e) (to the extent the Section 368 Treatment applies) and the control requirement of Section 368(c) of the Code (to the extent the Section 351 Treatment applies as an alternative or backup). (iv) Cooperation. The parties hereto shall, and shall cause their respective controlled Affiliates to, cooperate with each other and their respective counsel and tax advisors to document, support and preserve the Intended Tax Treatment, including by (A) taking all commercially reasonable actions, and refraining from taking any action, that would reasonably be expected to prevent or impede the Merger from qualifying for the Intended Tax Treatment, (B) following the Closing, maintaining the continuity of the historic business of the Surviving Corporation or using a significant portion of the assets of the Surviving Corporation in a business, in each case as contemplated by Treasury Regulations Section 1.368-1(d), (C) preserving and maintaining books, records and documentation reasonably necessary or appropriate to support qualification of the Merger for the Intended Tax Treatment, and (D) ensuring that the transfer of assets and liabilities to Legacy Sub pursuant to Section 7.06(a) is structured and effected in a manner that does not adversely affect the qualification of the Merger for the Intended Tax Treatment. (v) Post-Closing Restrictions. Following the Closing, no party hereto shall, and no party shall permit or cause its respective controlled Affiliates to, take any action, or knowingly fail to take any action, which action or failure to act (A) prevents or impedes, or would reasonably be expected to prevent or impede, the Merger from qualifying for the Intended Tax Treatment, (B) would cause a violation of the continuity of interest requirement under Treasury Regulations Section 1.368-1(e), including any plan or intention to reacquire shares of Acquiror stock issued as Merger Consideration or issued to PIPE investors pursuant to the PIPE Offering, in a manner inconsistent with such requirement, (C) would cause the holders of Acquiror stock immediately following the Effective Time to fail to satisfy the control requirement of Section 368(c) of the Code for purposes of Section 351(a), or (D) would otherwise cause the Merger to fail to qualify for the Intended Tax Treatment.

### Section 8.04 Confidentiality; Publicity

(a) Each party agrees that it will, and will cause its respective Affiliates and Representatives to, hold in strict confidence and agrees that it will not, and will cause its respective Affiliates and Representatives not to disclose or use any Confidential Information. If a party is requested or required pursuant to written or oral questions or requests for information or documents in any litigation, Governmental Order, interrogatory, civil investigation, demand or other similar process to disclose any Confidential Information, then such party will notify the other promptly of the request or requirement so that the non-requesting party may seek an appropriate protective order or waive compliance with the provisions of this Section 8.04(a). If, in the absence of a protective order or the receipt of a waiver hereunder, a party is, on the advice of counsel, compelled to disclose any Confidential Information to any Governmental Authority or else stand liable for contempt, then such party may disclose the Confidential Information to the Governmental Authority; provided, however, that such party shall use its reasonable best efforts to obtain, at the request of the other, an order or other assurance that confidential treatment will be accorded to such portion of the Confidential Information required to be disclosed as the non-requesting party shall designate. The foregoing provisions shall not apply to any Confidential Information that is generally available to the public immediately prior to the time of disclosure unless such Confidential Information is so available due to the actions of a party.

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(b) The initial Press Release relating to this Agreement shall be a joint press release, the text of which shall be agreed to by each of Acquiror and the Company (the "Press Release"). Promptly after the issuance of the Press Release, Acquiror shall file a current report on Form 8-K (the "Form 8-K") with the Press Release and a description of this Agreement as required by applicable Securities Laws, which the Company shall review, comment upon and approve (which approval shall not be unreasonably withheld, conditioned or delayed) prior to filing (with the Company reviewing, commenting upon and approving such Form 8-K in any event no later than the third (3rd) Business Day after the execution of this Agreement). In connection with the preparation of the Press Release, the Form 8-K, or any other report, statement, filing notice or application made by or on behalf of a party to any Governmental Authority or other third party in connection with the transactions contemplated hereby, each party shall, upon request by any other party, furnish the parties with all information concerning themselves, their respective directors, officers and equity holders, and such other matters as may be reasonably necessary or advisable in connection with the Transactions contemplated hereby, or any other report, statement, filing, notice or application made by or on behalf of a party to any third party and/or any Governmental Authority in connection with the Transactions contemplated hereby. Furthermore, nothing contained in this Section 8.04(b) shall prevent Acquiror or the Company or its respective Affiliates from furnishing customary or other reasonable information concerning the Transactions to their investors and prospective investors that is substantively consistent with public statements previously consented to by the other party in accordance with this Section 8.04(b).

Section 8.05 Notification of Certain Matters. During the Interim Period, each party will give prompt notice to the other parties if such party or its Affiliates: (a) fails to comply with or satisfy any covenant, condition or agreement to be complied with or satisfied by it or its Affiliates in any material respect; (b) receives any notice or other communication in writing from any third party (including any Governmental Authority and Nasdaq) alleging (i) that the consent of such third party is or may be required in connection with the transactions contemplated by this Agreement or (ii) any non-compliance with any Law by such party or its Affiliates; (c) receives any notice or other communication from any Governmental Authority in connection with the transactions contemplated by this Agreement; or (d) becomes aware of the commencement or threat, in writing, of any Action against such party or any of its Affiliates, or any of their respective properties or assets, or, to the Knowledge of such party, any officer, director, partner, member or manager, in his, her or its capacity as such, of such party or of its Affiliates with respect to the consummation of the transactions contemplated by this Agreement. No such notice will constitute an acknowledgement or admission by the party providing the notice regarding whether or not any of the representations, warranties or covenants contained in this Agreement have been breached.

Section 8.06 Post-Closing Cooperation. Following the Closing, each party shall, on the request of any other party, execute such further documents, and perform such further acts, as may be reasonably necessary or appropriate to give full effect to the allocation of rights, benefits, obligations and liabilities contemplated by this Agreement and the transactions contemplated hereby.

### Section 8.07 Company Options

(a) At the Effective Time, each Company Option that is outstanding and unexercised immediately prior to the Effective Time, whether or not vested, will be converted into and become an option to purchase Acquiror Common Stock. All rights with respect to the Company Common Stock under the Company Options assumed by Acquiror will thereupon be converted into rights with respect to Acquiror Common Stock.

(b) Accordingly, from and after the Effective Time: (i) each Company Option assumed by Acquiror may be exercised solely for shares of Acquiror Common Stock; (ii) the number of shares of Acquiror Common Stock subject to each Company Option assumed by Acquiror and the per share exercise price for the Acquiror Common Stock issuable upon exercise of each Company Option assumed by Acquiror will be appropriately adjusted pursuant to the terms of the applicable incentive plans; and (iii) any restriction on the exercise of any Company Option assumed by Acquiror will continue in full force and effect and the term, exercisability, vesting schedule, status as an "incentive stock option" under Section 422 of the Code, if applicable, and other provisions of such Company Option will otherwise remain unchanged; provided, however, that: (1)

to the extent provided under the terms of a Company Option, such Company Option assumed by Acquiror in accordance with this Section 8.07(b) will, in accordance with its terms, be subject to further adjustment as appropriate to reflect any stock split, division or subdivision of shares, stock dividend, reverse stock split (including the Reverse Stock Split), consolidation of shares, reclassification, recapitalization or other similar transaction with respect to Acquiror Common Stock subsequent to the Effective Time; and (2) Acquiror's board of directors or a committee thereof will succeed to the authority and responsibility of the Company's board of directors or any committee thereof with respect to each Company Option assumed by Acquiror.

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(c) Notwithstanding anything to the contrary in this Section 8.07(c), the conversion of each Company Option (regardless of whether such option qualifies as an "incentive stock option" within the meaning of Section 422 of the Code) into an option to purchase shares of Acquiror Common Stock will be made in a manner consistent with Treasury Regulation Section 1.424-1, such that the conversion of a Company Option will not constitute a "modification" of such Company Option for purposes of Section 409A or Section 424 of the Code.

(d) Within twenty (20) Business Days after the Effective Time, Acquiror will deliver to each Person who, immediately prior to the Effective Time, was a holder of a Company Option a document evidencing the foregoing assumption of such option by Acquiror.

Section 8.08 Employment Agreements. As promptly as practicable following the Closing, Acquiror shall cause each of the employees listed on Schedule 8.08 to execute and deliver to Acquiror an employment agreement, in form and substance mutually agreed by the parties. Acquiror shall use commercially reasonable efforts to cause each such employment agreement, upon execution and delivery, to be and remain in full force and effect in accordance with its terms.

## ARTICLE IX.

### CONDITIONS TO MERGER

Section 9.01 Conditions to Each Party's Obligation to Effect the Merger. The respective obligations of each party to this Agreement to effect the Merger shall be subject to the satisfaction prior to the Closing Date of the following conditions:

(a) No Injunctions. No Governmental Authority of competent jurisdiction shall have enacted, issued, promulgated, enforced or entered any order, executive order, stop order, stay, decree, judgment or injunction (preliminary or permanent) or statute, rule or regulation which is in effect and which has the effect of making the Merger illegal or otherwise prohibiting consummation of the Merger.

(b) PIPE Offering. The PIPE Offering shall have been consummated or will be consummated concurrently with the Closing or immediately prior to the Closing in accordance with the terms of the Securities Purchase Agreement.

Section 9.02 Additional Conditions to the Obligations of Acquiror and Merger Sub. The obligations of Acquiror and Merger Sub to effect the Merger shall be subject to the satisfaction on or prior to the Closing Date of each of the following additional conditions, any of which may be waived in writing exclusively by Acquiror and Merger Sub:

(a) Representations and Warranties. The representations and warranties of the Company set forth in Article IV (in each case as qualified and limited by the Company Disclosure Schedules) and in any certificate or other writing delivered by the Company pursuant hereto shall be true and correct (i) as of the date of this Agreement (except in the case of this clause (i), (A) to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct as of such date, and (B) where the failure to be true and correct (without regard to any materiality or Company Material Adverse Effect qualifications contained therein), individually or in the aggregate, has not had, and is not reasonably likely to have, a Company Material Adverse Effect) and (ii) as of the Closing Date as though made on and as of the Closing Date (except in the case of this clause (ii), (A) to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct as of such date, (B) for changes expressly provided for in this Agreement, and (C) where the failure to be true and correct (without regard to any materiality or Company Material Adverse Effect qualifications contained therein), individually or in the aggregate, has not had, and is not reasonably likely to have, a Company Material Adverse Effect).

(b) Performance of Obligations of the Company. The Company shall have performed in all material respects all obligations required to be performed by it under this Agreement on or prior to the Closing Date.

(c) No Company Material Adverse Effect. No Company Material Adverse Effect shall have occurred since the date of this Agreement and be continuing.

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(d) Officers' Certificate. Acquiror shall have received an officers' certificate duly executed by the Chief Executive Officer of the Company to the effect that the conditions of Sections 9.02(a), (b) and (c) have been satisfied.

Section 9.03 Additional Conditions to the Obligations of the Company. The obligation of the Company to effect the Merger shall be subject to the satisfaction on or prior to the Closing Date of each of the following additional conditions, any of which may be waived, in writing, exclusively by the Company:

(a) Representations and Warranties. The representations and warranties of Acquiror and Merger Sub set forth in Article V (in each case as qualified and limited by the Acquiror Disclosure Schedules) and in any certificate or other writing delivered by Acquiror or Merger Sub pursuant hereto shall be true and correct (i) as of the date of this Agreement (except in the case of this clause (i), (A) to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct as of such date and (B) where the failure to be true and correct (without regard to any materiality or Acquiror Material Adverse Effect qualifications contained therein), individually or in the aggregate, has not had, and is not reasonably likely to have, a Acquiror Material Adverse Effect) and (ii) as of the Closing Date as though made on and as of the Closing Date (except in the case of this clause (ii), (A) to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct as of such date, (B) for changes contemplated by this Agreement and (C) where the failure to be true and correct (without regard to any materiality or Acquiror Material Adverse Effect qualifications contained therein), individually or in the aggregate, has not had, and is not reasonably likely to have, a Acquiror Material Adverse Effect).

(b) Performance of Obligations of Acquiror and Merger Sub. Acquiror and Merger Sub shall have performed in all material respects all obligations required to be performed by them under this Agreement on or prior to the Closing Date.

(c) No Acquiror Material Adverse Effect. No Acquiror Material Adverse Effect shall have occurred since the date of this Agreement and be continuing.

(d) Resignations. The Company shall have received copies of the resignations, effective as of the Effective Time, of each director and officer (for such officers, limited to the offices held by such officers and not to such officer's employment) of Acquiror and its Subsidiaries as required under this Agreement.

(e) Officers' Certificate. The Company shall have received an officers' certificate duly executed by the Chief Executive Officer of Acquiror to the effect that the conditions of Sections 9.03(a), (b), and (c) have been satisfied.

## ARTICLE X.

### MISCELLANEOUS

Section 10.01 Survival of Representations, Warranties and Covenants. Subject to the limitations set forth in this Section 10.01, the Surviving Representations shall survive the Effective Time until the date that is twelve (12) months from the Effective Time (the "Survival Period"), provided, however, that no party will be liable or otherwise required to pay (except in the case of fraud) in respect of the Surviving Representations for claims in excess of \$750,000 in the aggregate with respect to all claims. It is express intent of the parties that if Survival Period is shorter or longer than the statute of limitations that would otherwise have been applicable to such claim, then, by contract, the applicable statute of limitations with respect to such claim shall be reduced to the shortened or increased to the extended Survival Period contemplated hereby. Other than the Surviving Representations, none of the representations, warranties, covenants or agreements in this Agreement or in any instrument delivered pursuant to this Agreement shall survive the Effective Time, other than (i) those covenants or agreements of the parties which by their terms apply, or are to be performed in whole or in part, after the Effective Time and (ii) notwithstanding any other provision of this Section 10.01 or this Agreement, (A) the covenants and agreements of the parties set forth in Section 8.03 (Tax Matters) shall survive the Closing and shall remain in full force and effect until the later of (x) the expiration of the applicable statute of limitations (including any extensions thereof) with respect to the Tax matters to which such covenants relate and (y) the final resolution of any Tax proceeding with respect to which notice has been given prior to the expiration of such statute of limitations, and (B) the representations and warranties set forth in Sections 4.14 and 5.06, to the extent they relate to or are necessary to support the Intended Tax Treatment, shall survive the Closing and shall remain in full force and effect until the expiration of the applicable statute of limitations (including any extensions thereof).

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Section 10.02 Notices. All notices and other communications among the parties shall be in writing and shall be deemed to have been duly given (i) when delivered in person, (ii) when delivered after posting in the United States mail having been sent registered or certified mail return receipt requested, postage prepaid, (iii) when delivered by FedEx or other nationally recognized overnight delivery service or (iv) when e-mailed during normal business hours (and otherwise as of the immediately following Business Day), addressed as follows:

(a) If to Acquiror or Merger Sub to:

Shuttle Pharmaceuticals Holdings, Inc.  
401 Professional Drive, Suite 260  
Cathetersburg, MD 20879  
Attn: Christopher Cooper  
E-mail:

with a copy (which shall not constitute notice) to:

Sullivan & Worcester, LLP  
1251 Avenue of the Americas, 19<sup>th</sup> Floor  
New York, NY 10020  
Attn: Aaron Schleicher  
E-mail:

(b) If to the Company to:

United Dogecoin Inc.  
1462 Erie Blvd., Suite C101  
Schenectady, NY 12005  
Attn: Ryan Trasolini  
E-mail:

with copies (which shall not constitute notice) to:

Ruskin Moscou Faltischek PC  
1425 RXR Plaza  
East Tower, 15<sup>th</sup> Floor  
Uniondale, NY 11556  
Attn: Stephen E. Fox  
E-mail:

or to such other address or addresses as the parties may from time to time designate in writing.

Section 10.03 Assignment. No party hereto shall assign this Agreement or any part hereof without the prior written consent of the other parties. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective permitted successors and assigns. Any attempted assignment in violation of the terms of this Section 10.03 shall be null and void, ab initio.

Section 10.04 Rights of Third Parties. Except as otherwise provided in Section 7.02 and Section 10.14, this Agreement is exclusively for the benefit of the Company, and its respective successors and permitted assigns, with respect to the obligations of Acquiror and Merger Sub under this Agreement, and for the benefit of Acquiror and Merger Sub, and their respective successors and permitted assigns, with respect to the obligations of the Company under this Agreement, and this Agreement shall not be deemed to confer upon or give to any other third party any remedy, claim, liability, reimbursement, cause of action or other right.

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Section 10.05 Expenses. Except as otherwise provided herein (including Section 8.03(a) and this Section 10.05), each party hereto shall bear its own Transaction Expenses in connection with this Agreement and the Transactions, including all fees and expenses of legal counsel, investment banks, brokers, finders and other representatives. In addition, except as otherwise provided herein, each party shall be solely responsible for any and all expenses, liability, and obligations arising from or relating to its own operations prior to the Closing, including but not limited to, tax liabilities, payroll, employee benefits, severance, accrued compensation, and any other employment-related liabilities.

Section 10.06 Governing Law. This Agreement, and all claims or causes of action based upon, arising out of, or related to this Agreement or the transactions contemplated hereby, shall be governed by, and construed in accordance with, the Laws of the State of Delaware, without giving effect to principles or rules of conflict of laws to the extent such principles or rules would require or permit the application of Laws of another jurisdiction.

Section 10.07 Captions; Counterparts. The captions in this Agreement are for convenience only and shall not be considered a part of or affect the construction or interpretation of any provision of this Agreement. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The words "execution," "signed," "signature," and words of like import in this Agreement or in any other certificate, agreement or document related to this Agreement shall include images of manually executed signatures transmitted by facsimile or other electronic format (including, without limitation, ".pdf," ".tif" or ".jpg") and other electronic signatures (including, without limitation, DocuSign and AdobeSign). The use of electronic signatures and electronic records (including, without limitation, any contract or other record created, generated, sent, communicated, received, or stored by electronic means) shall be of the same legal effect, validity and enforceability as a manually executed signature or use of a paper-based record-keeping system to the fullest extent permitted by applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the Uniform Electronic Transactions Act and any other applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act or the Uniform Commercial Code.

Section 10.08 Schedules and Exhibits. The Schedules and Exhibits referenced herein are a part of this Agreement as if fully set forth herein. All references herein to Schedules and Exhibits shall be deemed references to such parts of this Agreement, unless the context shall otherwise require. Any disclosure made by a party in the Schedules with reference to any section or schedule of this Agreement shall be deemed to be a disclosure with respect to all other sections or schedules to which such disclosure may apply solely to the extent the relevance of such disclosure is reasonably apparent on the face of the disclosure in such Schedule. Certain information set forth in the Schedules is included solely for informational purposes.

Section 10.09 Entire Agreement. This Agreement (together with the Schedules and Exhibits to this Agreement) constitute the entire agreement among the parties relating to the transactions contemplated hereby and supersede any other agreements, whether written or oral, that may have been made or entered into by or among any of the parties hereto or any of their respective Subsidiaries relating to the transactions contemplated hereby. No representations, warranties, covenants, understandings, agreements, oral or otherwise, relating to the transactions contemplated by this Agreement exist between the parties except as expressly set forth or referenced in this Agreement.

Section 10.10 Amendments. This Agreement may be amended or modified in whole or in part, only by a duly authorized agreement in writing executed in the same manner as this Agreement (but not necessarily by the same natural persons who executed this Agreement) and which makes reference to this Agreement. The approval of this Agreement by the equityholders of any of the parties shall not restrict the ability of the board of directors of any of the parties to enter into an amendment to this Agreement pursuant to this Section 10.10.

Section 10.11 Severability. If any provision of this Agreement is held invalid or unenforceable by any court of competent jurisdiction, the other provisions of this Agreement shall remain in full force and effect. The parties further agree that if any provision contained herein is, to any extent, held invalid or unenforceable in any respect under the Laws governing this Agreement, they shall take any actions necessary to render the remaining provisions of this Agreement valid and enforceable to the fullest extent permitted by Law and shall amend or otherwise modify this Agreement to replace any provision contained herein that is held invalid or unenforceable with a valid and enforceable provision giving effect to the intent of the parties.

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Section 10.12 Jurisdiction; WAIVER OF TRIAL BY JURY. Any Action based upon, arising out of or related to this Agreement, or the transactions contemplated hereby, shall be brought in any state or federal court located in the State of New York, and each of the parties irrevocably submits to the exclusive jurisdiction of each such court in any such Action, waives any objection it may now or hereafter have to personal jurisdiction, venue or to convenience of forum, agrees that all claims in respect of the Action shall be heard and determined only in any such court, and agrees not to bring any Action arising out of or relating to this Agreement or the transactions contemplated hereby in any other court. Nothing herein contained shall be deemed to affect the right of any party to serve process in any manner permitted by Law, or to commence legal proceedings or otherwise proceed against any other party in any other jurisdiction, in each case, to enforce judgments obtained in any Action brought pursuant to this Section 10.12. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY ACTION BASED UPON, ARISING OUT OF OR RELATED TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. EACH OF THE PARTIES HERETO CERTIFIES AND ACKNOWLEDGES THAT (I) NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (II) EACH SUCH PARTY UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (III) EACH SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (IV) EACH SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE TRANSACTIONS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS IN THIS SECTION 10.12.

Section 10.13 Enforcement. The parties agree that irreparable damage for which monetary damages, even if available, would not be an adequate remedy, would occur in the event that the parties do not perform their obligations under the provisions of this Agreement (including failing to take such actions as are required of them hereunder to consummate this Agreement) in accordance with its specified terms or otherwise breach such provisions. The parties acknowledge and agree that (a) the parties shall be entitled to an injunction, specific performance, or other equitable relief, to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof, without proof of damages, this being in addition to any other remedy to which they are entitled under this Agreement, and (b) the right of specific enforcement is an integral part of the transactions contemplated by this Agreement and without that right, none of the parties would have entered into this Agreement. Each party agrees that it will not oppose the granting of specific performance and other equitable relief on the basis that the other parties have an adequate remedy at Law or that an award of specific performance is not an appropriate remedy for any reason at Law or equity. The parties acknowledge and agree that any party seeking an injunction to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement in accordance with this Section 10.13 shall not be required to provide any bond or other security in connection with any such injunction.

Section 10.14 Non-Recourse. This Agreement may only be enforced against, and any claim or cause of action based upon, arising out of, or related to this Agreement or the transactions contemplated hereby may only be brought against, the entities that are expressly named as parties hereto, and then only with respect to the specific obligations set forth herein with respect to such party. Except to the extent a named party to this Agreement (and then only to the extent of the specific obligations undertaken by such named party in this Agreement), (a) no past, present or future director, manager, officer, employee, incorporator, member, partner, stockholder, Affiliate, agent, attorney, advisor or Representative or Affiliate of any named party to this Agreement and (b) no past, present or future director, manager, officer, employee, incorporator, member, partner, stockholder, Affiliate, agent, attorney, advisor or Representative or Affiliate of any of the foregoing shall have any liability (whether in contract, tort, equity or otherwise) for any one or more of the representations, warranties, covenants, agreements or other obligations or liabilities of any one or more of the Company, Acquiror or Merger Sub under this Agreement of or for any claim based on, arising out of, or related to this Agreement or the transactions contemplated hereby.

Section 10.15 Acknowledgements. Each of the parties acknowledges and agrees (on its own behalf and on behalf of its respective Affiliates and its and their respective Representatives) that: (a) it has conducted its own independent investigation of the other party and its business, assets, liabilities and operations and has been afforded access it deems adequate for such purpose; (b) the representations and warranties of the Company expressly set forth in Article IV (the "Company Representations") constitute the sole and exclusive representations and warranties of the Company in connection with the Transactions, and the representations and warranties of Acquiror and Merger Sub expressly set forth in Article V (the "Acquiror and Merger Sub Representations") constitute the sole and exclusive representations and warranties of Acquiror and Merger Sub in connection with the Transactions; (c) except for the Company Representations and the Acquiror and Merger Sub Representations, none of the parties hereto or any other Person makes or has made any other express or implied representation or warranty with respect to any party or the Transactions; and (d) each party is relying solely on the representations and warranties expressly set forth in this Agreement in entering into this Agreement and consummating the Transactions. Notwithstanding the foregoing, nothing in this Section 10.15 (or elsewhere in this Agreement) shall limit or restrict (i) any liability for Fraud with respect to the making of the representations and warranties expressly set forth in this Agreement, or (ii) any rights or obligations arising under applicable federal securities Laws.

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IN WITNESS WHEREOF, Acquiror, Merger Sub, and the Company have caused this Agreement to be executed and delivered as of the date first written above by their respective officers thereunto duly authorized.

**SHUTTLE PHARMACEUTICALS HOLDINGS, INC.**

By: /s/ Christopher Cooper  
Name: Christopher Cooper  
Title: Interim Chief Executive Officer

**SHUTTLE MERGER SUB, INC.**

By: /s/ Christopher Cooper  
Name: Christopher Cooper  
Title: Interim Chief Executive Officer

**UNITED DOGECOIN INC.**

By: /s/ Ryan Trasolini  
Name: Ryan Trasolini  
Title: Chief Executive Officer

[Signature Page to Agreement and Plan of Merger]

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## SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (this "Agreement") is dated as of April 30, 2026, between Shuttle Pharmaceuticals Holdings, Inc., a Delaware corporation (the "Company"), and each purchaser identified on the signature pages hereto (each, including its successors and assigns, a "Purchaser," and collectively, the "Purchasers").

WHEREAS, subject to the terms and conditions set forth in this Agreement and pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"), and Rule 506 promulgated thereunder, the Company desires to issue and sell to each Purchaser, and each Purchaser, severally and not jointly, desires to purchase from the Company, securities of the Company as more fully described in this Agreement;

WHEREAS, the Company intends to authorize a new series of convertible preferred stock of the Company designated as Series B-2 Convertible Preferred Stock, par value \$0.00001 per share (together with any convertible preferred stock issued in replacement thereof in accordance with the terms thereof) (the "Series B-2 Convertible Preferred Stock") the terms of which are set forth in the Certificate of Designations (as defined below) in substantially the form attached hereto as Exhibit A;

WHEREAS, the Company desires to sell and the Purchasers desire to purchase, upon the terms and subject to the conditions contained in this Agreement, the securities described herein.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and each Purchaser agree as follows:

## ARTICLE I

## DEFINITIONS

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement, for all purposes of this Agreement, the following terms have the meanings set forth in this Section 1.1:

"Acquiring Person" shall have the meaning ascribed to such term in Section 4.5.

"Action" shall have the meaning ascribed to such term in Section 3.1(j).

"Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

"Agreement" shall have the meaning ascribed to such term in the preamble.

"BHCA" shall have the meaning ascribed to such term in Section 3.1(pp).

"Board of Directors" means the board of directors of the Company.

"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 are generally open for use by customers on such day.

"Certificate of Designations" shall have the meaning ascribed to such term in Section 2.1(a).

"Closing" means the closing of the purchase and sale of the Purchased Securities pursuant to Section 2.1.

"Closing Date" means the Trading Day on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto, and all conditions precedent to (i) the Purchasers' obligations to pay the Subscription Amount and (ii) the Company's obligations to deliver the Purchased Securities, in each case, have been satisfied or waived.

"Commission" means the United States Securities and Exchange Commission.

"Common Stock" means the common stock of the Company, par value \$0.00001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

"Common Stock Equivalents" means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

"Common Warrants" means the Common Stock Purchase Warrants issued to the Purchasers pursuant to Section 2.2(a)(v) of this Agreement substantially in the form of Exhibit B attached hereto.

"Company" shall have the meaning ascribed to such term in the preamble.

"Company Counsel" means Sullivan & Worcester LLP.

"Conversion Shares" means the shares of Common Stock issuable or to be issued upon conversion of the Series B-2 Convertible Preferred Stock.

"Disclosure Schedules" means the Disclosure Schedules of the Company delivered concurrently herewith.

"Disclosure Time" means, (i) if this Agreement is signed on a day that is not a Trading Day or after 9:00 a.m. (New York City time) and before midnight (New York City time) on any Trading Day, 9:01 a.m. (New York City time) on the Trading Day immediately following the date hereof, unless otherwise instructed as to an earlier time by the Placement Agent, and (ii) if this Agreement is signed between midnight (New York City time) and 9:00 a.m. (New York City time) on any Trading Day, no later than 9:01 a.m. (New York City time) on the date hereof, unless otherwise instructed as to an earlier time by the Placement Agent.

"Disqualification Event" shall have the meaning ascribed to such term in Section 3.1(r).

"Effective Date" means the earliest of the date that (a) the Registration Statement registering for resale all Milestone Shares (if then outstanding or underlying then outstanding Pre-Funded Warrants), Conversion Shares and Warrant Shares has been declared effective by the Commission, (b) all of the Milestone Shares, Conversion Shares and Warrant Shares have been sold pursuant to Rule 144 or may be sold pursuant to Rule 144 without the requirement for the Company to be in compliance with the current public information required under Rule 144 and without volume or manner-of-sale restrictions, (c) following the one year anniversary of the Closing Date or, with respect to the Milestone Shares, the respective dates of issuance of either the Milestone Shares or Pre-Funded Warrants, provided that a holder of Milestone Shares, Conversion Shares or Warrant Shares is not an Affiliate of the Company, or (d) all of the Milestone Shares, Conversion Shares or Warrant Shares may be sold pursuant to an exemption from registration under Section 4(a)(1) of the Securities Act without volume or manner-of-sale restrictions and Company Counsel has delivered to such holders a standing written unqualified opinion that resales may then be made by such holders of the Conversion Shares and Warrant Shares and any Milestone Shares pursuant to such exemption which opinion shall be in form and substance reasonably acceptable to such holders.

"Environmental Laws" shall have the meaning ascribed to such term in Section 3.1(m).

"Escrow Agent" means InBank.

"Escrow Agreement" means the escrow agreement entered into by and among the Company, the Target Company, the Placement Agent, the Escrow Agent, and escrow manager party thereto, as amended, pursuant to which the Purchasers shall deposit Subscription Amounts with the Escrow Agent to be applied to the transactions contemplated hereunder.

"Evaluation Date" shall have the meaning ascribed to such term in Section 3.1(s).

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

"Exempt Issuance" means the issuance of (a) shares of Common Stock or options to employees, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to the Company, (b) securities upon the exercise or exchange of or conversion of any Purchased Securities issued hereunder, and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of this Agreement, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities (other than in connection with stock splits or combinations or anti-dilution provisions contained therein as disclosed in the SEC Reports prior to the date of this Agreement) or to extend the term of such securities, and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, 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 prohibition period in [Section 4.13](#) herein, and provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities, and (d) securities of the Company pursuant to or contemplated by the Transaction Documents.

“[FCPA](#)” means the Foreign Corrupt Practices Act of 1977, as amended.

“[Federal Reserve](#)” shall have the meaning ascribed to such term in [Section 3.1\(pp\)](#).

“[Future Offering](#)” shall have the meaning ascribed to such term in [Section 4.13](#).

“[GAAP](#)” shall have the meaning ascribed to such term in [Section 3.1\(h\)](#).

“[Hazardous Materials](#)” shall have the meaning ascribed to such term in [Section 3.1\(m\)](#).

“[Indebtedness](#)” shall have the meaning ascribed to such term in [Section 3.1\(aa\)](#).

“[Intellectual Property Rights](#)” shall have the meaning ascribed to such term in [Section 3.1\(p\)](#).

“[Irrevocable Instructions](#)” shall have the meaning ascribed to such term in [Section 2.2\(a\)\(iv\)](#).

“[Issuer Covered Person](#)” shall have the meaning ascribed to such term in [Section 3.1\(rr\)](#).

“[IT Systems and Data](#)” shall have the meaning ascribed to such term in [Section 3.1\(kk\)](#).

“[Legend Removal Date](#)” shall have the meaning ascribed to such term in [Section 4.1\(c\)](#).

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“[Liens](#)” means a lien, charge, pledge, mortgage, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“[Material Adverse Effect](#)” shall have the meaning assigned to such term in [Section 3.1\(b\)](#).

“[Material Permits](#)” shall have the meaning ascribed to such term in [Section 3.1\(n\)](#).

“[Merger Agreement](#)” means that certain Agreement and Plan of Merger to be entered into by and among the Company, Shuttle Merger Sub, Inc. and the Target Company.

“[Milestone Event](#)” has the meaning set forth in [Section 2.4\(b\)](#).

“[Milestone Event Notice](#)” has the meaning set forth in [Section 2.4\(c\)](#).

“[Milestone Issuance](#)” has the meaning set forth in [Section 2.4\(a\)](#).

“[Milestone Shares](#)” has the meaning set forth in [Section 2.4\(a\)](#).

“[Minimum Uptime](#)” has the meaning set forth in [Section 2.4\(b\)](#).

“[Mining Rigs](#)” has the meaning set forth in [Section 2.4\(b\)](#).

“[Money Laundering Laws](#)” shall have the meaning ascribed to such term in [Section 3.1\(qq\)](#).

“[OFAC](#)” shall have the meaning ascribed to such term in [Section 3.1\(nn\)](#).

“[Offering Response Date](#)” shall have the meaning ascribed to such term in [Section 4.13](#).

“[Person](#)” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“[Placement Agent](#)” means E.F. Hutton & Co.

“[Placement Agency Agreement](#)” means that certain Placement Agency Agreement, dated as of April 30, 2026, by and between the Company and the Placement Agent.

“[Pre-Funded Warrants](#)” means, collectively, the pre-funded Common Stock purchase warrants delivered to the Purchasers in connection with the occurrence of a Milestone Event in accordance with [Section 2.4](#) hereof, which Pre-Funded Warrants shall be exercisable immediately and shall expire when exercised in full, in the form of [Exhibit C](#) attached hereto.

“[Pre-Funded Warrant Shares](#)” means the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants.

“[Proceeding](#)” means an action, claim, suit, investigation, or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or, to the knowledge of the Company, threatened.

“[Purchased Securities](#)” means the Series B-2 Convertible Preferred Stock and the Common Warrants.

“[Purchaser](#)” shall have the meaning ascribed to such term in the preamble.

“[Purchaser Party](#)” shall have the meaning ascribed to such term in [Section 4.8](#).

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“[Registration Statement](#)” means a registration statement meeting the requirements set forth in [Section 4.12](#) of this Agreement and covering the resale by the Purchasers of the Milestone Shares (if then outstanding or underlying Pre-Funded Warrants then outstanding), the Conversion Shares and the Warrant Shares.

“[Required Approvals](#)” shall have the meaning ascribed to such term in [Section 3.1\(e\)](#).

“[Rule 144](#)” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“[Rule 424](#)” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“[SEC Reports](#)” shall have the meaning ascribed to such term in [Section 3.1\(h\)](#).

“[Securities](#)” means the Purchased Securities, the Conversion Shares, the Pre-Funded Warrants and the Milestone Shares.

“[Securities Act](#)” shall have the meaning ascribed to such term in the recitals.

“[Series B-2 Convertible Preferred Stock](#)” shall have the meaning ascribed to such term in the recitals.

“[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).

“[Standard Settlement Period](#)” shall have the meaning ascribed to such term in [Section 4.1\(c\)](#).

“[Stated Value](#)” means \$5,000 per share of Series B-2 Convertible Preferred Stock, subject to adjustment as set forth in the Certificate of Designations.

“Stockholder Approval” means such approval as may be required by the applicable rules and regulations of The Nasdaq Stock Market LLC (or any successor entity) from the stockholders of the Company with respect to each of (i) the issuance of Common Stock upon the exercise of the Warrants, (ii) the issuance of Common Stock upon the conversion of the Series B-1 Convertible Preferred Stock, par value \$0.0001 per share, (iii) the issuance of Common Stock upon the conversion of the Series B-2 Convertible Preferred Stock and (iv) if necessary, a proposal to amend the certificate of incorporation to increase the authorized share capital of the Company to an amount sufficient to cover issuances described in clauses (i) through (iii) or to effectuate a reverse stock split whereby the authorized shares capital is not split and is sufficient to cover such issuances (and such reverse split is effectuated)(the “Capital Event”).

“Subscription Amount” means, as to each Purchaser, the aggregate amount to be paid for Purchased Securities purchased hereunder as specified below such Purchaser’s name on the signature page of this Agreement and next to the heading “Subscription Amount,” as indicated on the signature page of this Agreement, in United States dollars and in immediately available funds.

“Subsidiary” means any subsidiary of the Company as set forth in the SEC Reports.

“Target Company” means United Dogecoin Inc., a Delaware corporation.

“Trading Day” means a day on which the principal Trading Market is open for trading.

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“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange (or any successors to any of the foregoing).

“Transaction C/D” means the Certificate of Designations, Preferences, and Rights of the Series B-2 Convertible Preferred Stock of the Company, to be issued to the stockholders of the Target Company pursuant to the terms of the Merger Agreement.

“Transaction Information” shall have the meaning ascribed to such term in Section 3.3.2(f).

“Transaction Documents” means this Agreement, the Certificate of Designations, the Transaction C/D, the Escrow Agreement, the Common Warrants, the Pre-Funded Warrants (if any), the Placement Agency Agreement, the Lock-Up Agreement, the Merger Agreement, all exhibits and schedules thereto and hereto, and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Transfer Agent” means VStock Transfer, LLC, the current transfer agent of the Company, with a mailing address of 18 Lafayette Place, Woodmere, NY 11598 and an email address of info@vstocktransfer.com, and any successor transfer agent of the Company.

“Warrants” means, collectively, the Common Warrants and the Pre-Funded Warrants.

“Warrant Shares” means the shares of Common Stock issuable upon exercise of the Common Warrants.

## ARTICLE II

### PURCHASE AND SALE

#### 2.1 Closing.

(a) Prior to the Closing Date, the Company shall have adopted and filed with the Secretary of State of the State of Delaware the Certificate of Designations, Preferences, and Rights of the Series B-2 Convertible Preferred Stock of the Company, in substantially the form of Exhibit A attached to this Agreement (the “Certificate of Designations”).

(b) On the Closing Date, upon the terms and subject to the conditions set forth herein, the Company agrees to sell, and the Purchasers, severally and not jointly, agree to purchase an aggregate of \$11,000,000 of Series B-2 Convertible Preferred Stock, plus Common Stock Purchase Warrants to purchase one hundred percent (100%) of the number of shares of Common Stock underlying the Series B-2 Convertible Preferred Stock as of the Closing Date, exercisable for a period of three (3) years at an exercise price of \$1.03 per share. The Company shall issue and allot to each Purchaser its respective Purchased Securities, and the Company and each Purchaser shall deliver the other items set forth in Section 2.2 deliverable at the Closing. Upon satisfaction of the covenants and conditions set forth in Sections 2.2 and 2.3, the Closing shall take place remotely by electronic transfer of the Closing documentation.

(c) At or prior to the Closing, the Company will deliver the Irrevocable Instructions to the Transfer Agent, and the Subscription Amounts will be delivered to the Escrow Agent, to be held in accordance with the terms of the Escrow Agreement. The Escrow Agent shall hold the Subscription Amounts during the applicable period commencing on the date hereof and until delivery of a Release Notice to the Escrow Agent, as defined in and pursuant to the Escrow Agreement. Upon delivery of the Release Notice, the Escrow Agent shall release to the Company each Purchaser’s Subscription Amount pursuant to the terms of the Escrow Agreement.

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#### 2.2 Deliveries.

(a) On or prior to the Closing Date (except as indicated below), the Company shall deliver or cause to be delivered to each Purchaser and the Placement Agent, as applicable, the following:

(i) this Agreement duly executed by the Company;

(ii) the Escrow Agreement duly executed by the Company;

(iii) the Escrow Agent’s wire instructions, on Company letterhead and executed by the Chief Executive Officer or Chief Financial Officer;

(iv) a copy of the Irrevocable Instructions to the Transfer Agent instructing the Transfer Agent to reserve a sufficient number of shares of Common Stock for issuance upon the full conversion of all of the Series B-2 Convertible Preferred Stock, and full exercise of the Warrants (the “Irrevocable Instructions”);

(v) Common Stock Purchase Warrants to purchase one hundred percent (100%) of the aggregate number of shares of Common Stock issuable upon full conversion of the Series B-2 Convertible Preferred Stock;

(vi) a legal opinion of Company Counsel directed to the Placement Agent and the Purchasers, in form and substance reasonably acceptable to the Placement Agent;

(vii) a customary officers’ certificate, executed and delivered by the Company’s executive officers, as to the accuracy of the representations and warranties contained in this Agreement;

(viii) a secretary’s certificate executed and delivered by the Company’s corporate secretary certifying that (A) the Company’s charter documents are true and complete, have not been modified and are in full force and effect; (B) that the resolutions of the Company’s Board of Directors relating to the Offering are in full force and effect and have not been modified; (C) as to the incumbency of the officers of the Company and (D) other customary certifications reasonably satisfactory to the Placement Agent;

(ix) a Certificate of Good Standing of the Company issued by the Secretary of State of Delaware, dated as of a recent date prior to the Closing Date; and

(x) evidence, in form and substance acceptable to the Placement Agent and its counsel, of the filing with the Secretary of State of the State of Delaware of the Certificate of Designations.

(b) On or prior to the Closing Date, each Purchaser shall deliver or cause to be delivered to the Company or the Escrow Agent, as applicable, the following:

(i) to the Company, this Agreement duly executed by such Purchaser; and

(ii) to the Escrow Agent, such Purchaser’s Subscription Amount, equal to Stated Value multiplied by the number of shares of Series B-2 Convertible Preferred Stock to be purchased by such Purchaser.

#### 2.3 Closing Conditions.

(a) The obligations of the Company hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on the Closing Date of the representations and warranties of the Purchasers contained herein (unless such representation or warranty is as of a specific date therein in which case they shall be accurate in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) as of such date);

(ii) all obligations, covenants and agreements of each Purchaser required to be performed at or prior to the Closing Date shall have been performed; and

(iii) the delivery by each Purchaser of the items set forth in Section 2.2(b) of this Agreement.

(b) The respective obligations of the Purchasers hereunder in connection with the Closing are subject to the following conditions being met:

(i) The Company shall have filed the Certificate of Designations with the Secretary of State of the State of Delaware;

(ii) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on the Closing Date of the representations and warranties of the Company contained herein (unless such representation or warranty is as of a specific date therein in which case they shall be accurate in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) as of such date);

(iii) all obligations, covenants and agreements of the Company required to be performed at or prior to the Closing Date shall have been performed;

(iv) the delivery by the Company of the items set forth in Section 2.2(a) of this Agreement;

(v) there shall have been no Material Adverse Effect with respect to the Company since the date hereof;

(vi) all necessary corporate approvals have been obtained;

(vii) the Company shall have delivered, or caused to be delivered, the duly executed Merger Agreement; and

(viii) from the date hereof to the Closing Date, trading in the Common Stock shall not have been suspended by the Commission or the Company's principal Trading Market, and, at any time prior to the Closing Date, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on any Trading Market, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred after the date of this Agreement any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change in, any financial market which, in each case, in the reasonable judgment of such Purchaser, makes it impracticable or inadvisable to purchase the Purchased Securities at the Closing.

#### 2.4 Milestone Issuances.

(a) Following the Closing, subject to the satisfaction (or waiver) of the conditions set forth herein, the Company shall issue and deliver to the Purchasers, for no additional consideration, up to three equal installments of Pre-Funded Warrants to purchase 10,861,908 shares of Common Stock in the aggregate (for a total of up to 32,585,725 Milestone Shares in the aggregate if all three Milestone Events are achieved). Each such issuance of Pre-Funded Warrants in respect of a Milestone Event is referred to herein as a "Milestone Issuance". The shares of Common Stock issuable upon the exercise of any Pre-Funded Warrants issued in connection with a Milestone Event, if any, are referred to herein as the "Milestone Shares".

(b) Each of the following clauses (i), (ii) and (iii) is a "Milestone Event" for purposes of this Section 2.4. For the avoidance of doubt, each Milestone Event may only be achieved once and shall entitle the Purchasers to only one Milestone Issuance in respect thereof, regardless of how many times the conditions described therein may be satisfied:

(i) the date upon which the Company or a subsidiary thereof purchased or purchases an aggregate of 2,000 dogecoin mining rigs ("Mining Rigs");

(ii) the date upon which the Company or a subsidiary thereof achieves a minimum 90% fleet operational uptime (the "Minimum Uptime") and maintains the Minimum Uptime for any seven (7) consecutive day period, excluding scheduled maintenance windows for servicing and force majeure events, and provided that such date is on or prior to the sixty (60) calendar day anniversary of the commencement of operational uptime of the Mining Rigs; and

(iii) the date upon which the Company or a subsidiary thereof executes a binding colocation and hosting agreement securing electrical power and related infrastructure services at a rate not exceeding \$0.075 per kilowatt-hour, inclusive of all material operating costs.

(c) Upon the achievement of a Milestone Event, the Company shall, within three (3) Business Days thereafter, provide written notice to each Purchaser (the "Milestone Event Notice") specifying (i) the Milestone Event that has occurred, (ii) the date of occurrence of such Milestone Event and (iii) such Purchaser's Pro Rata Portion of the Pre-Funded Warrants issuable in respect of such Milestone Event. Within three (3) Business Days following delivery of the applicable Milestone Event Notice, subject to the terms and conditions set forth herein, the Company shall issue and deliver to each Purchaser (or its designee) such Purchaser's pro rata portion of the Pre-Funded Warrants issuable in respect of such Milestone Event.

(d) Notwithstanding anything to the contrary herein, in no event shall Pre-Funded Warrants be issued pursuant to this Section 2.4 unless and until the Company obtains the Stockholder Approval.

### ARTICLE III

#### REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties of the Company. Except as set forth in the Disclosure Schedules or as set forth in or contemplated by the Transaction Information (as defined below), all of which shall be deemed a part hereof and shall qualify any representation or otherwise made herein to the extent of the disclosure contained in the corresponding section of the Disclosure Schedules or otherwise in or contemplated by the Transaction Information, the Company hereby makes the following representations and warranties to each Purchaser:

(a) Subsidiaries. All of the direct and indirect material subsidiaries of the Company are set forth in Schedule 3.1(a). The Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary free and clear of any Liens, and all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. If the Company has no subsidiaries, all other references to the Subsidiaries or any of them in the Transaction Documents shall be disregarded.

(b) Organization and Qualification. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and, if applicable under the laws of the jurisdiction in which they were formed, in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation nor in default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, would not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect"); provided, however, that "Material Adverse Effect" shall not include any event, occurrence, fact, condition or change, directly or indirectly, arising out of or attributable to: (i) the announcement, pendency or completion of the transactions contemplated by the Transaction Documents, or (ii) any action required or permitted by the Transaction Documents or any action taken (or omitted to be taken) with the written consent of or at the written request of Purchaser. As to all Company and Subsidiary power, authority and qualification, no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(c) Authorization, Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors, a committee of the Board of Directors or the Company's stockholders in connection herewith or therewith other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which it is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(d) No Conflicts. The execution, delivery and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, anti-dilution or similar adjustments, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as would not have or reasonably be expected to result in a Material Adverse Effect; provided, that a change in market price or trading volume of the Common Stock alone shall not be deemed, in and of itself, to constitute a Material Adverse Effect.

(e) Filings, Consents and Approvals. Except as set forth in the Transaction Documents, the Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than: (i) the filings required pursuant to Section 4.4 of this Agreement, (ii) the filing with the Commission pursuant to Section 4.12 of this Agreement, (iii) notice(s) and/or application(s) to and approvals by each applicable Trading Market for the listing of the Milestone Shares, Conversion Shares and Warrant Shares for trading thereon in the time and manner required thereby, (iv) the filing of Form D with the Commission and such filings as are required to be made under applicable state securities laws and (v) any such consents, waivers and authorizations that have been or, prior to the Closing Date, will be, obtained by the Company (collectively, the “Required Approvals”).

(f) Issuance of the Securities. The Series B-2 Convertible Preferred Stock, Conversion Shares, Warrants, Milestone Shares and Warrant Shares are duly authorized and, the Series B-2 Convertible Preferred Stock when issued and paid for in accordance with the applicable Transaction Documents, and the Conversion Shares upon conversion of the Series B-2 Convertible Preferred Stock, the Warrant Shares upon the exercise of the Common Warrants and the Milestone Shares upon the exercise of the Pre-Funded Warrants, will be validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company other than restrictions on transfer provided for in the Transaction Documents.

(g) Capitalization. The capitalization of the Company as of the date hereof is as set forth on Schedule 3.1(g), which Schedule 3.1(g) shall also include the number of shares of Common Stock owned beneficially, and of record, by Affiliates of the Company as of the date hereof. The Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee equity awards under the Company's equity incentive plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plans and pursuant to the conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. Except as have been complied with or waived, no Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents. Except as a result of the purchase and sale of the Securities, and except as set forth on Schedule 3.1(g), there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock or the capital stock of any Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents or capital stock of any Subsidiary. The issuance and sale of the Securities will not obligate the Company or any Subsidiary to issue shares of Common Stock or other securities to any Person (other than the Purchasers). Except as set forth on Schedule 3.1(g), there are no outstanding securities or instruments of the Company or any Subsidiary with any provision that adjusts the exercise, conversion, exchange or reset price of such security or instrument upon an issuance of securities by the Company or any Subsidiary. There are no outstanding securities or instruments of the Company or any Subsidiary that contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem a security of the Company or such Subsidiary. The Company does not have any stock appreciation rights or “phantom stock” plans or agreements or any similar plan or agreement. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. Except for the Required Approvals, no further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company's capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company's stockholders.

(h) SEC Reports: Financial Statements. Except as set forth in Schedule 3.1(h), the Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two (2) years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the “SEC Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. Except as set forth in Schedule 3.1(h), as of their respective dates, or to the extent corrected or modified by a subsequent amendment, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, 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. The Company has never been an issuer subject to Rule 144(i) under the Securities Act. The financial statements of the Company included in the SEC Reports, as have been amended or restated as of the date hereof, comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(i) Material Changes: Undisclosed Events, Liabilities or Developments. Since the filing of the Company's most recent Annual Report on Form 10-K, (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company equity incentive plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement, no event, liability, fact, circumstance, occurrence or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or its Subsidiaries or their respective businesses, prospects, properties, operations, assets or financial condition that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed prior to the time that this representation is made.

(j) Litigation. Except as would not reasonably be expected to result in a Material Adverse Effect, there is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an “Action”). Neither the Company nor any Subsidiary, nor, to the knowledge of the Company, any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty, which would result in a Material Adverse Effect. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any material investigation by the Commission involving the Company or any current or former director or officer of the Company that is required to be disclosed in the SEC Reports that is not disclosed. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(k) Labor Relations. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which would reasonably be expected to result in a Material Adverse Effect. To the knowledge of the Company, 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. To the knowledge of the Company, no executive officer of the Company or any Subsidiary is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all applicable U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(l) Compliance. Neither the Company nor any Subsidiary: (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any judgment, decree or order of any court, arbitrator or other governmental authority or (iii) is or has been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case as would not have or reasonably be expected to result in a Material Adverse Effect.

(m) Environmental Laws. The Company and its Subsidiaries (i) are in compliance with all federal, state, local and foreign laws relating to pollution or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including 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 (“Environmental Laws”); (ii) have received all permits licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (iii) are in compliance with all terms and conditions of any such permit, license or approval where in each clause (i), (ii) and (iii), the failure to so comply would be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect.

(n) Regulatory Permits. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such certificates, authorizations and permits would not reasonably be expected to result in a Material Adverse Effect (“Material Permits”), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Material Permit.

(o) Title to Assets. 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 compliance.

(p) **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 would 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 reasonably 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 consolidated 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 would not have or reasonably be expected to 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. The Company has no knowledge of any facts that would preclude it from having valid license rights or clear title to the Intellectual Property Rights. The Company has no knowledge that it lacks or will be unable to obtain any rights or licenses to use all Intellectual Property Rights that are necessary to conduct its business.

(q) **Insurance.** The Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged, including, but not limited to, directors and officers insurance coverage at least equal to the aggregate Subscription Amount. Neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

(r) **Transactions With Affiliates and Employees.** Except as set forth in the SEC Reports, during the past two fiscal years and the subsequent interim period through the date of this Agreement, none of the officers or directors of the Company or any Subsidiary and, to the knowledge of the Company, none of the employees of the Company or any Subsidiary is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for (i) payment of salary or consulting or director fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(s) **Sarbanes-Oxley: Internal Accounting Controls.** The Company and the Subsidiaries are in compliance in all material respects with any and all applicable requirements of the Sarbanes-Oxley Act of 2002, as amended, that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of the Closing Date. The Company and the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management’s general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management’s general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company and the Subsidiaries have established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and the Subsidiaries and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission’s rules and forms. The Company’s certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company and the Subsidiaries as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the “**Evaluation Date**”). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date.

(t) **Certain Fees.** Except for the fees and expenses of the Placement Agent, no brokerage or finder’s fees or commissions are or will be payable by the Company or any Subsidiary to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this [Section 3.1\(t\)](#) that may be due in connection with the transactions contemplated by the Transaction Documents.

(u) **Private Placement.** Assuming the accuracy of the Purchasers’ representations and warranties set forth in [Section 3.2](#), no registration under the Securities Act is required for the offer and sale of the Securities by the Company to the Purchasers as contemplated hereby. The issuance and sale of the Securities hereunder does not contravene the rules and regulations of the Trading Market.

(v) **Investment Company.** The Company is not, and immediately after receipt of payment for the Purchased Securities, will not be, required to register as an “investment company” within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an “investment company” subject to registration under the Investment Company Act of 1940, as amended.

(w) **Registration Rights.** Other than to each of the Purchasers pursuant to [Section 4.12](#) of this Agreement, or as set forth in the SEC Reports, no Person has any right to cause the Company or any Subsidiary to effect the registration under the Securities Act of any securities of the Company or any Subsidiary.

(x) **Listing and Maintenance Requirements.** The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. The Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. The Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements. The Common Stock is currently eligible for electronic transfer through the Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees to the Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer.

(y) **Application of Takeover Protections.** The Company and the Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company’s certificate of incorporation (or similar charter documents) or the laws of its state of incorporation that is or could become applicable to the Purchasers as a result of the Purchasers and the Company fulfilling their obligations or exercising their rights under the Transaction Documents, including without limitation as a result of the Company’s issuance of the Securities and the Purchasers’ ownership of the Securities.

(z) **Disclosure.** Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Purchasers or their agents or counsel with any information that it believes constitutes or might constitute material, non-public information. The Company understands and confirms that the Purchasers will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Purchasers regarding the Company and its Subsidiaries, their respective businesses and the transactions contemplated hereby, including the Disclosure Schedules to this Agreement, 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. The press releases disseminated by the Company during the twelve (12) months preceding the date of this Agreement taken as a whole do not 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 were made and when made, not misleading. The Company acknowledges and agrees that no Purchaser makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in [Section 3.2](#) hereof.

(aa) **No Integrated Offering.** Assuming the accuracy of the Purchasers’ representations and warranties set forth in [Section 3.2](#), neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of (i) the Securities Act which would require the registration of any such securities under the Securities Act, or (ii) any applicable shareholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(bb) **Solvency.** Based on the consolidated financial condition of the Company as of the Closing Date, after giving effect to the receipt by the Company of the proceeds from the sale of the Purchased Securities hereunder (i) the fair saleable value of the Company’s assets exceeds the amount that will be required to be paid on or in respect of the Company’s existing debts and other liabilities (including known contingent liabilities) as they mature, (ii) the Company’s assets do not constitute unreasonably small capital to carry on its business as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by the Company, consolidated and projected capital requirements and capital availability thereof, and (iii) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its liabilities when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one year from the Closing Date. [Schedule 3.1\(bb\)](#) sets forth as of the date hereof all outstanding secured and unsecured Indebtedness of the Company or any Subsidiary, or for which the Company or any Subsidiary has commitments. For the purposes of this Agreement, “**Indebtedness**” means (x) any liabilities for borrowed money or amounts owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business), (y) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Company’s consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (z) the present value of any lease payments in excess of \$50,000 due under leases required to be capitalized in accordance with GAAP. Neither the Company nor any Subsidiary is in default with respect to any Indebtedness.

(cc) **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.

(dd) No General Solicitation. Neither the Company nor any Person acting on behalf of the Company has offered or sold any of the Purchased Securities by any form of general solicitation or general advertising. The Company has offered the Purchased Securities for sale only to the Purchasers and certain other “accredited investors” within the meaning of Rule 501 under the Securities Act.

(ee) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law or (iv) violated in any material respect any provision of FCPA or any applicable anti-corruption or anti-bribery laws.

(ff) Accountants. The Company’s independent registered public accounting firm is set forth in the SEC Reports. To the knowledge and belief of the Company, such accounting firm (i) is a registered public accounting firm as required by the Exchange Act, (ii) has expressed its opinion with respect to the financial statements included in the Company’s Annual Report for the fiscal year ended December 31, 2025 and (iii) shall express its opinion with respect to the financial statements to be included in the Company’s Annual Report for the now current fiscal year.

(gg) No Disagreements with Accountants and Lawyers. There are no 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.

(hh) Acknowledgment Regarding Purchasers’ Purchase of Securities. The Company acknowledges and agrees that each of the Purchasers is acting solely in the capacity of an arm’s length purchaser with respect to the Transaction Documents and the transactions contemplated thereby. The Company further acknowledges that no Purchaser is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated thereby and any advice given by any Purchaser or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchasers’ purchase of the Securities. The Company further represents to each Purchaser that the Company’s decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

(ii) Acknowledgment Regarding Purchaser’s Trading Activity. Anything in this Agreement or elsewhere herein to the contrary notwithstanding (except for Sections 3.2(g) and 4.14 hereof), it is understood and acknowledged by the Company that: (i) none of the Purchasers has been asked by the Company to agree, nor has any Purchaser agreed, to desist from purchasing or selling, long and/or short, securities of the Company, or “derivative” securities based on securities issued by the Company or to hold the Securities for any specified term; (ii) past or future open market or other transactions by any Purchaser, specifically including, without limitation, Short Sales or “derivative” transactions, before or after the closing of this or future private placement transactions, may negatively impact the market price of the Company’s publicly-traded securities; (iii) any Purchaser, and counter-parties in “derivative” transactions to which any such Purchaser is a party, directly or indirectly, presently may have a “short” position in the Common Stock; and (iv) each Purchaser shall not be deemed to have any affiliation with or control over any arm’s length counter-party in any “derivative” transaction. The Company further understands and acknowledges that (y) one or more Purchasers may engage in hedging activities at various times during the period that the Securities are outstanding, including, without limitation, during the periods that the value of the Milestone Shares, Conversion Shares and the Warrant Shares deliverable with respect to Securities are being determined, and (z) such hedging activities (if any) could reduce the value of the existing stockholders’ equity interests in the Company at and after the time that the hedging activities are being conducted. The Company acknowledges that such aforementioned hedging activities do not constitute a breach of any of the Transaction Documents.

(jj) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company, other than, in the case of clauses (ii) and (iii), compensation paid to the Placement Agent in connection with the placement of the Purchased Securities.

(kk) Cybersecurity. (i)(x) To the Company’s knowledge, there has been no security breach or other compromise of or relating to any of the Company’s or any Subsidiary’s information technology and computer systems, networks, hardware, software, data (including the data of its respective customers, employees, suppliers, vendors and any third party data maintained by or on behalf of it), equipment or technology (collectively, “IT Systems and Data”) and (y) the Company and the Subsidiaries have not been notified of, and has no knowledge of any event or condition that would reasonably be expected to result in, any security breach or other compromise to its IT Systems and Data; (ii) the Company and the 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 Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification, except as would not, individually or in the aggregate, have a Material Adverse Effect; (iii) the Company and the Subsidiaries have implemented and maintained commercially reasonable safeguards to maintain and protect its material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and Data; and (iv) the Company and the Subsidiaries have implemented backup and disaster recovery technology consistent with industry standards and practices.

(ll) Reserved.

(mm) Stock Option Plans. Each stock option granted by the Company under the Company’s stock option plan was granted (i) in accordance with the terms of the Company’s stock option plans and (ii) with an exercise price at least equal to the fair market value of the 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 Company policy or practice 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.

(nn) Office of Foreign Assets Control. Neither the Company nor any Subsidiary nor, to the Company’s knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department (“OFAC”).

(oo) U.S. Real Property Holding Corporation. The Company is not and has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon Purchaser’s request.

(pp) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries or its Affiliates 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 its 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.

(qq) Money Laundering. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the “Money Laundering Laws”), and no Action or Proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any Subsidiary with respect to the Money Laundering Laws is pending or, to the knowledge of the Company or any Subsidiary, threatened.

(rr) No Disqualification Events. With respect to the Securities to be offered and sold hereunder in reliance on Rule 506 under the Securities Act, none of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering hereunder, 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 Securities Act) connected with the Company in any capacity at the time of sale (each, an “Issuer Covered Person”) is subject to any of the “Bad Actor” disqualifications described in Rule 506(d)(1)(i) to (viii) under the Securities 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(c), and has furnished to the Purchasers a copy of any disclosures provided thereunder.

(ss) Other Covered Persons. Other than the Placement Agent, the Company is not aware of any person (other than any Issuer Covered Person) that has been or will be paid (directly or indirectly) remuneration for solicitation of purchasers in connection with the sale of any Securities.

(tt) Notice of Disqualification Events. The Company will notify the Purchasers and the Placement Agent in writing prior to the Closing Date of (i) any Disqualification Event relating to any Issuer Covered Person and (ii) any event that would, with the passage of time, reasonably be expected to become a Disqualification Event relating to any Issuer Covered Person, in each case of which it is aware.

(uu) Authorized Shares. The maximum number of shares of Common Stock issuable upon conversion of the Series B-2 Convertible Preferred Stock and exercise of the Warrants and issuable in connection with the occurrence of a Milestone Event does not exceed the number of authorized but unissued and unreserved shares of Common Stock, of the Company.

**3.2 Representations and Warranties of the Purchasers**. Each Purchaser, for itself and for no other Purchaser, hereby represents and warrants as of the date hereof and as of the Closing Date to the Company as follows (unless as of a specific date therein, in which case they shall be accurate as of such date):

(a) Organization; Authority. Such Purchaser is either an individual or an entity duly incorporated or formed, validly existing and in good standing under the laws of the jurisdiction of its incorporation or formation with full right, corporate, partnership, limited liability company or similar power and authority to enter into and to consummate the transactions contemplated by the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of the Transaction Documents and performance by such Purchaser of the transactions contemplated by the Transaction Documents have been duly authorized by all necessary corporate, partnership, limited liability company or similar action, as applicable, on the part of such Purchaser. Each Transaction Document to which it is a party has been duly executed by such Purchaser, and when delivered by such Purchaser in accordance with the terms hereof, will constitute the valid and legally binding obligation of such Purchaser, enforceable against it in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors’ rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by

applicable law.

(b) Own Account. Such Purchaser understands that the Securities are “restricted securities” and have not been registered under the Securities Act or any applicable state securities law and is acquiring the Securities as principal for its own account and not with a view to or for distributing or reselling such Securities or any part thereof in violation of the Securities Act or any applicable state securities law, has no present intention of distributing any of such Securities in violation of the Securities Act or any applicable state securities law and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Securities in violation of the Securities Act or any applicable state securities law (this representation and warranty not limiting such Purchaser’s right to sell the Securities pursuant to the Registration Statement or otherwise in compliance with applicable federal and state securities laws). Such Purchaser is acquiring the Securities hereunder in the ordinary course of its business.

(c) Purchaser Status. At the time such Purchaser was offered the Purchased Securities, it was, and as of the date hereof it is, and on each date on which it converts any Series B-2 Convertible Preferred Stock, receives any Milestone Shares or exercises any Warrants, it will be either: (i) an “accredited investor” as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7), (a)(8), (a)(9), (a)(12), or (a)(13) under the Securities Act or (ii) a “qualified institutional buyer” as defined in Rule 144A(a) under the Securities Act. Such Purchaser hereby represents that neither such Purchaser nor any of its Rule 506(d) Related Parties (as defined below) is a “bad actor” within the meaning of Rule 506(d) promulgated under the Securities Act. For purposes of this Agreement, “Rule 506(d) Related Party” shall mean a person or entity covered by the “Bad Actor” disqualification provision of Rule 506(d) of the Securities Act.

(d) Experience of Such Purchaser. Such Purchaser, 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 Purchaser 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.

(e) General Solicitation. Such Purchaser is not 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 Purchaser, any other general solicitation or general advertisement.

(f) Independent Investigation; Access to Information. In making its decision to purchase the Securities, such Purchaser has relied solely upon independent investigation made by the Purchaser and the Company’s representations in Section 3.1 of this Agreement. Such Purchaser acknowledges and agrees that the Purchaser has received such information as such Purchaser deems necessary in order to make an investment decision with respect to the Securities, including with respect to the Company, the Target Company and the transactions contemplated by the Merger Agreement, and made its own assessment and is satisfied concerning the relevant financial, tax and other economic considerations relevant to the Purchaser’s investment in the Securities. Such Purchaser acknowledges that it has had the opportunity to review the Transaction Documents (including all exhibits and schedules thereto) and the SEC Reports and has been afforded (i) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of the offering of the Securities and the merits and risks of investing in the Securities; (ii) access to information about the Company, the Target Company and their respective financial condition, results of operations, business, properties, management and prospects sufficient to enable it to evaluate its investment; and (iii) the opportunity to obtain such additional information that the Company and the Target Company each possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment (all of such information, collectively with the Transaction Documents, the “Transaction Information”). Such Purchaser acknowledges that certain information provided by the Company and the Target Company was based on projections, and such projections were prepared based on assumptions and estimates that are inherently uncertain and are subject to a wide variety of significant business, economic and competitive risks and uncertainties that could cause actual results to differ materially from those contained in the projections. Such Purchaser acknowledges and agrees that neither the Placement Agent nor any Affiliate of the Placement Agent has provided such Purchaser with any information or advice with respect to the Securities nor is such information or advice necessary or desired. Neither the Placement Agent nor any Affiliate has made or makes any representation as to the Company or the quality of the Securities and the Placement Agent and any Affiliate may have acquired non-public information with respect to the Company which such Purchaser agrees need not be and has not been provided to it. In connection with the issuance of the Securities to such Purchaser, neither the Placement Agent nor any of its Affiliates has acted as a financial advisor or fiduciary to such Purchaser.

(g) Certain Transactions and Confidentiality. Other than consummating the transactions contemplated hereunder, such Purchaser has not, nor has any Person acting on behalf of or pursuant to any understanding with such Purchaser, 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 Purchaser 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 Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser’s assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser’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 Purchaser’s representatives, including, without limitation, its officers, directors, partners, legal and other advisors, employees, agents and Affiliates, such Purchaser 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.

(h) Control Person and Associated Restrictions. The Purchaser is not a “control person” of the Company (within the meaning of applicable securities laws, and which generally includes a person holding or controlling (alone or jointly or in concert with other persons) more than 20% of the shares of Common Stock), and the purchase of the Purchased Securities contemplated by this Agreement will not result in the Purchaser becoming a “control person”. The Purchaser acknowledges that the terms of the Series B-2 Convertible Preferred Stock and the Warrants will include restrictions on the ability of the Purchaser to hold more than 19.99% of the outstanding shares of Common Stock from time to time.

The Company acknowledges and agrees that the representations contained in this Section 3.2 shall not modify, amend or affect such Purchaser’s right to rely on the Company’s representations and warranties contained in this Agreement or any representations and warranties contained in any other Transaction Document or any other document or instrument executed and/or delivered in connection with this Agreement or the consummation of the transactions contemplated hereby. 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.

#### ARTICLE IV.

#### OTHER AGREEMENTS OF THE PARTIES

##### 4.1 Transfer Restrictions.

(a) The Securities may only be disposed of in compliance with state and federal securities laws. In connection with any transfer of Securities other than pursuant to an effective registration statement or Rule 144, to the Company or to an Affiliate of a Purchaser or in connection with a pledge as contemplated in Section 4.1(b), the Company may require the transferor thereof to provide to the Company an opinion of counsel selected by the transferor and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Securities under the Securities Act. As a condition of transfer, any such transferee shall agree in writing to be bound by the terms of this Agreement and shall have the rights and obligations of a Purchaser under this Agreement.

(b) The Purchasers agree to the inprinting, so long as is required by this Section 4.1, of a legend on any of the Securities in substantially the following form:

NEITHER THIS SECURITY NOR THE SECURITIES INTO WHICH THIS SECURITY IS [CONVERTIBLE][EXERCISABLE] HAS BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE SECURITIES ISSUABLE UPON [CONVERSION][EXERCISE] OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT WITH A REGISTERED BROKER-DEALER OR OTHER LOAN WITH A FINANCIAL INSTITUTION THAT IS AN “ACCREDITED INVESTOR” AS DEFINED IN RULE 501(a) UNDER THE SECURITIES ACT OR OTHER LOAN SECURED BY SUCH SECURITIES.

The Company acknowledges and agrees that a Purchaser may from time to time pledge pursuant to a bona fide margin agreement with a registered broker-dealer or grant a security interest in some or all of the Securities to a financial institution that is an “accredited investor” as defined in Rule 501(a) under the Securities Act and, if required under the terms of such arrangement, such Purchaser may transfer pledged or secured Securities to the pledgees or secured parties. Such a pledge or transfer would not be subject to approval of the Company and no legal opinion of legal counsel of the pledgee, secured party or pledgor shall be required in connection therewith. Further, no notice shall be required of such pledge. At the appropriate Purchaser’s expense, the Company will execute and deliver such reasonable documentation as a pledgee or secured party of Securities may reasonably request in connection with a pledge or transfer of the Securities, including, if the Securities are subject to registration pursuant to Section 4.1.2 of this Agreement, the preparation and filing of any required prospectus supplement under Rule 424(b)(3) under the Securities Act or other applicable provision of the Securities Act to appropriately amend the list of selling stockholders included in the Registration Statement.

(c) Certificates evidencing the Securities shall not contain any legend (including the legend set forth in Section 4.1(b) hereof), (i) while a registration statement (including the Registration Statement) covering the resale of such security is effective under the Securities Act, (ii) following any sale of Milestone Shares, Warrant Shares or Conversion Shares pursuant to Rule 144 and the Company is then in compliance with the current public information required under Rule 144 (assuming cashless exercise of the Warrants), or (iii) if such Milestone Shares, Warrant Shares or Conversion Shares are eligible for sale under Rule 144 (assuming cashless exercise of the Warrants) without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such Securities and without volume or manner-of-sale restrictions, or (iv) if such legend is not required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the Commission). The Company shall cause its counsel to issue a legal opinion to the Transfer Agent or the Purchaser promptly after the Effective Date if required by the Transfer Agent to effect the removal of the legend hereunder, or if requested by a Purchaser, respectively. If all or any portion of the Series B-2 Convertible Preferred Stock are converted, or all or any portion of the Warrants are exercised at a time when there is an effective registration statement to cover the resale of the Milestone Shares, Conversion Shares or Warrant Shares, or if such Milestone Shares, Conversion Shares or Warrant Shares may be sold under Rule 144 (assuming cashless exercise of the

Warrants) or if such legend is not otherwise required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the Commission) then such Milestone Shares, Conversion Shares or Warrant Shares shall be issued free of all legends. The Company shall cause its counsel to issue a legal opinion to the Transfer Agent promptly after the Effective Date if required by the Transfer Agent to effect the removal of the legend hereunder or if required by a Purchaser. The Company agrees that following the Effective Date or at such time as such legend is no longer required under this [Section 4.1\(c\)](#), it will, no later than the earlier of (i) one (1) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined below) following the delivery by a Purchaser to the Company or the Transfer Agent of a certificate representing Milestone Shares, Conversion Shares or Warrant Shares, as the case may be, issued with a restrictive legend (such date, the "[Legend Removal Date](#)"), deliver or cause to be delivered to such Purchaser a certificate representing such shares that is free from all restrictive and other legends. The Company may not make any notation on its records or give instructions to the Transfer Agent that enlarge the restrictions on transfer set forth in this [Section 4](#). Certificates for Securities subject to legend removal hereunder shall be transmitted by the Transfer Agent to the Purchaser by crediting the account of the Purchaser's prime broker with the Depository Trust Company System as directed by such Purchaser. As used herein, "[Standard Settlement Period](#)" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of a certificate representing Milestone Shares, Conversion Shares or Warrant Shares, as the case may be, issued with a restrictive legend.

(d) Each Purchaser, severally and not jointly with the other Purchasers, agrees with the Company that such Purchaser will sell any Securities pursuant to either the registration requirements of the Securities Act, including any applicable prospectus delivery requirements, or an exemption therefrom, and that if Securities are sold pursuant to a Registration Statement, they will be sold in compliance with the plan of distribution set forth therein, and acknowledges that the removal of the restrictive legend from certificates representing Securities as set forth in this [Section 4.1](#) is predicated upon the Company's reliance upon this understanding.

4.2 [Furnishing of Information](#). Until the earlier of the time that (i) no Purchaser owns Securities and (ii) the Warrants have expired, the Company covenants to maintain the registration of the Common Stock under [Section 12\(b\)](#) or [12\(g\)](#) of the Exchange Act and to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act even if the Company is not then subject to the reporting requirements of the Exchange Act.

4.3 [Integration](#). The Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities in a manner that would require the registration under the Securities Act of the sale of the Securities or that would be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market such that it would require shareholder approval prior to the closing of such other transaction unless shareholder approval is obtained before the closing of such subsequent transaction.

4.4 [Securities Laws Disclosure; Publicity](#). The Company shall (a) by the Disclosure Time, issue a press release disclosing the material terms of the transactions contemplated hereby, and (b) file a Current Report on Form 8-K, including the Transaction Documents as exhibits thereto, with the Commission within the time required by the Exchange Act. From and after the issuance of such press release, the Company represents to the Purchasers that it shall have publicly disclosed all material, non-public information delivered to any of the Purchasers by the Company or any of its Subsidiaries, or any of their respective officers, directors, employees, Affiliates or agents, including, without limitation, the Placement Agent, in connection with the transactions contemplated by the Transaction Documents. In addition, effective upon the issuance of such press release, 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, employees, Affiliates or agents, including, without limitation, the Placement Agent, on the one hand, and any of the Purchasers or any of their Affiliates on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company. The Company and each Purchaser shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor any Purchaser shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any press release of any Purchaser, or without the prior consent of each Purchaser, with respect to any press release of the Company, which consent shall not unreasonably be withheld or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. Notwithstanding the foregoing, the Company shall not publicly disclose the name of any Purchaser, or include the name of any Purchaser in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of such Purchaser, except (a) as required (i) by federal securities law in connection with the filing of final Transaction Documents with the Commission and (ii) the Registration Statement and (b) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchasers with prior notice of such disclosure permitted under this clause (b) and reasonably cooperate with such Purchaser regarding such disclosure.

4.5 [Shareholder Rights Plan](#). No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that any Purchaser is an "[Acquiring Person](#)" under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that any Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities under the Transaction Documents or under any other agreement between the Company and the Purchasers.

4.6 [Non-Public Information](#). Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, which shall be disclosed pursuant to [Section 4.4](#), the Company covenants and agrees that neither it, nor any other Person acting on its behalf will provide any Purchaser or its agents or counsel with any information that constitutes, or the Company reasonably believes constitutes, material non-public information, unless prior thereto such Purchaser shall have consented in writing to the receipt of such information and agreed in writing with the Company to keep such information confidential. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company. To the extent that the Company, any of its Subsidiaries, or any of their respective officers, directors, agents, employees or Affiliates delivers any material, non-public information to a Purchaser without such Purchaser's consent, the Company hereby covenants and agrees that such Purchaser 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, including, without limitation, the Placement Agent, or a duty to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, Affiliates or agents, including, without limitation, the Placement Agent, not to trade on the basis of, such material, non-public information, provided that the Purchaser shall remain subject to applicable law. To the extent that any notice provided pursuant to any Transaction Document constitutes, or contains, material, non-public information regarding the Company or any Subsidiaries, the Company shall simultaneously with the delivery of such notice file such notice with the Commission pursuant to a Current Report on Form 8-K. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company.

4.7 [Use of Proceeds](#). The Company shall use the net proceeds from the sale of the Purchased Securities hereunder as follows: the first \$5,000,000 of gross proceeds shall be deposited into one or more accounts designated by Legacy Sub (as defined in the Merger Agreement), with the remainder, after taking into account payment of the Transaction Expenses (as defined in the Merger Agreement), deposited into an account designated by the Surviving Corporation (as defined in the Merger Agreement) and shall not use such proceeds: (a) for the satisfaction of any portion of the Company's debt (other than (i) payment of trade payables in the ordinary course of the Company's business and prior practices and (ii) payment, in the ordinary course of business, of amounts then currently due and payable on existing indebtedness owed to commercial banks), (b) for the redemption of any Common Stock or Common Stock Equivalents, (c) for the settlement of any outstanding litigation or (d) in violation of FCPA or OFAC regulations.

4.8 [Indemnification of Purchasers](#). Subject to the provisions of this [Section 4.8](#), the Company will indemnify and hold each Purchaser and its directors, officers, shareholders, members, partners, employees and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), each Person who controls such Purchaser (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, partners or employees (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a "[Purchaser Party](#)") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (a) any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or in the other Transaction Documents or (b) any action instituted against the Purchaser Parties in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company who is not an Affiliate of such Purchaser Party, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is solely based upon a material breach of such Purchaser Party's representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Purchaser Party may have with any such stockholder or any violations by such Purchaser Party of state or federal securities laws or any conduct by such Purchaser Party which is finally judicially determined to constitute fraud, gross negligence or willful misconduct). If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Purchaser Party. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (x) the employment thereof has been specifically authorized by the Company in writing, (y) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (z) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Company and the position of such Purchaser Party, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Purchaser Party under this Agreement (1) for any settlement by a Purchaser Party effected without the Company's prior written consent, which shall not be unreasonably withheld or delayed; or (2) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Purchaser Party's breach of any of the representations, warranties, covenants or agreements made by such Purchaser Party in this Agreement or in the other Transaction Documents. The indemnification required by this [Section 4.8](#) 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 are incurred. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Purchaser Party against the Company or others and any liabilities the Company may be subject to pursuant to law.

4.9 [Reservation of Common Stock](#). The Company covenants that, following the occurrence of a Capital Event and thereafter, the Company shall reserve and the Company shall continue to reserve and keep available at all times, free of preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue Milestone Shares pursuant to [Section 2.4](#) hereof, Conversion Shares pursuant to the terms of the Series B-2 Convertible Preferred Stock set forth in the Certificate of Designations, and Warrant Shares pursuant to the terms of the Common Warrants.

4.10 [Listing of Common Stock](#). The Company hereby agrees to use its best efforts to maintain the listing or quotation of the Common Stock on the Trading Market on which it is currently listed, and concurrently with the receipt of Stockholder Approval, the Company shall apply to list or quote all of the Milestone Shares (then outstanding or underlying then outstanding Pre-Funded Warrants), Conversion Shares and Warrant Shares on such Trading Market and promptly secure the listing of all of the Milestone Shares (then outstanding or underlying then outstanding Pre-Funded Warrants), Conversion Shares and Warrant Shares on such Trading Market. The Company further agrees, if the Company applies to have the Common Stock traded on any other Trading Market, it will then include in such application all of the Milestone Shares, Conversion Shares and Warrant Shares, and will take such other action as is necessary to cause all of the Milestone Shares, Conversion Shares and Warrant Shares to be listed or quoted on such other Trading Market as promptly as possible. The Company will then take all action reasonably necessary to continue the listing and trading of its Common Stock on a Trading Market and will comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules of the Trading Market. The Company agrees to maintain the eligibility of the Common Stock for electronic transfer through the Depository Trust Company or another established clearing corporation, including, without limitation, by timely payment of fees to the Depository Trust Company or such other established clearing corporation in connection with such electronic transfer.

4.11 [Equal Treatment of Purchasers](#). No consideration (including any modification of this Agreement) 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 is also offered to all of the parties to this Agreement. For clarification purposes, this provision constitutes a separate right granted to each Purchaser by the Company and negotiated

separately by each Purchaser, and is intended for the Company to treat the Purchasers as a class and shall not in any way be construed as the Purchasers acting in concert or as a group with respect to the purchase, disposition or voting of Securities or otherwise.

4.12 Registration Statement. On or before the fifteenth (15<sup>th</sup>) day following the date the Company receives Stockholder Approval, the Company shall (i) file a Registration Statement covering the sale of the Milestone Shares, Conversion Shares and Warrant Shares set forth herein, which shall have been declared effective by the Commission, and have not been withdrawn and not be subject to a stop order issued by the Commission on or before the fifteenth (15<sup>th</sup>) day following the date the Company receives Stockholder Approval (or the forty fifth (45<sup>th</sup>) day following the date the Company receives Stockholder Approval in the event that the Commission determines to review the Registration Statement), and (ii) ensure the prospectus contained in the Registration Statement complies with Sections 5(b) and 10 of the Exchange Act. Notwithstanding anything to the contrary, in the event that no Milestone Shares (and/or Pre-Funded Warrants) have been issued pursuant to this Agreement on or before the date that the Registration Statement is declared effective by the Commission, the Company shall not be obligated to include any such Milestone Shares on such Registration Statement, and shall instead be obligated to include such Milestone Shares on a subsequent resale registration statement required to be filed and declared effective by the Commission within thirty (30) days of a Milestone Event.

4.13 Reserved.

4.14 Certain Transactions and Confidentiality. Each Purchaser, severally and not jointly with the other Purchasers, covenants that neither it, nor any Affiliate acting on its behalf or pursuant to any understanding with it, will execute any purchases or sales, including Short Sales, of any of the Company's securities during the period commencing with the execution of this Agreement and ending at such time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4. Each Purchaser, severally and not jointly with the other Purchasers, covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company pursuant to the initial press release as described in Section 4.4, such Purchaser will maintain the confidentiality of the existence and terms of this transaction and the information included in the Disclosure Schedules (other than as disclosed to its legal and other representatives). Notwithstanding the foregoing, and notwithstanding anything contained in this Agreement to the contrary, the Company expressly acknowledges and agrees that (i) no Purchaser makes any representation, warranty or covenant hereby that it will not engage in effecting transactions in any securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4, (ii) no Purchaser shall be restricted or prohibited from effecting any transactions in any securities of the Company in accordance with applicable securities laws from and after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4 and (iii) no Purchaser shall have any duty of confidentiality or duty not to trade in the securities of the Company to the Company, any of its Subsidiaries, or any of their respective officers, directors, employees, Affiliates or agent, including, without limitation, the Placement Agent, after the issuance of the initial press release as described in Section 4.4. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the covenant 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.

4.15 Conversion Procedures. The Certificate of Designations sets forth the totality of the procedures, if applicable, required of the Purchasers in order to convert the Series B-2 Convertible Preferred Stock. No additional legal opinion, other information or instructions shall be required of the Purchasers to convert their Series B-2 Convertible Preferred Stock. Without limiting the preceding sentences, no ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required in order to convert the Series B-2 Convertible Preferred Stock. The Company shall honor conversions of the Series B-2 Convertible Preferred Stock and shall issue and allot Conversion Shares in accordance with the terms, conditions and time periods set forth in the Transaction Documents.

4.16 Form D; Blue Sky Filings. The Company agrees to timely file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof, promptly upon request of any Purchaser. The Company shall 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 Purchasers at the Closing under applicable securities or "Blue Sky" laws of the states of the United States, and shall provide evidence of such actions promptly upon request of any Purchaser.

4.17 Acknowledgment of Dilution. The Company acknowledges that the issuance of the Securities may result in dilution of the outstanding shares of Common Stock, which dilution may be substantial under certain market conditions. The Company further acknowledges that its obligations under the Transaction Documents, including, without limitation, its obligation to issue the Milestone Shares (subject to the occurrence of the relevant Milestone Event), Conversion Shares, Warrant Shares and any other securities of the Company pursuant to and subject to the terms and conditions of the Transaction Documents, are unconditional and absolute and not subject to any right of set off, counterclaim, delay or reduction, regardless of the effect of any such dilution or any claim the Company may have against any Purchaser and regardless of the dilutive effect that such issuance may have on the ownership of the other stockholders of the Company.

ARTICLE V.

MISCELLANEOUS

5.1 Termination. This Agreement may be terminated by any Purchaser, as to such Purchaser's obligations hereunder only and without any effect whatsoever on the obligations between the Company and the other Purchasers, by written notice to the other parties, if the Closing has not been consummated on or before the fifth (5<sup>th</sup>) Trading Day following the date hereof; provided, however, that no such termination will affect the right of any party to sue for any breach by any other party (or parties).

5.2 Fees and Expenses. Except as expressly set forth in the Transaction Documents to the contrary, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company and any exercise notice delivered by a Purchaser), stamp taxes and other taxes and duties levied in connection with the delivery of any Securities to the Purchasers.

5.3 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

5.4 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the time of transmission, if such notice or communication is delivered via email attachment at the email address as set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the time of transmission, if such notice or communication is delivered via email attachment at the email address as set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2nd) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto. To the extent that any notice provided pursuant to any Transaction Document constitutes, or contains, material, non-public information regarding the Company or any Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K.

5.5 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and Purchasers which purchased at least 67% in interest of the Series B-2 Convertible Preferred Stock based on the initial Subscription Amounts hereunder (or, prior to the Closing, the Company and each Purchaser) or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought, provided that if any amendment, modification or waiver disproportionately and adversely impacts a Purchaser (or group of Purchasers), the consent of such disproportionately impacted Purchaser (or group of Purchasers) shall also be required. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right. Any proposed amendment or waiver that disproportionately, materially and adversely affects the rights and obligations of any Purchaser relative to the comparable rights and obligations of the other Purchasers shall require the prior written consent of such adversely affected Purchaser. Any amendment effected in accordance with this Section 5.5 shall be binding upon each Purchaser and holder of Securities and the Company.

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

5.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of each Purchaser (other than by merger). Any Purchaser may assign any or all of its rights under this Agreement to any Person to whom such Purchaser assigns or transfers any Securities, provided that such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions of the Transaction Documents that apply to the "Purchasers."

5.8 No Third-Party Beneficiaries. The Placement Agent shall be the third-party beneficiary of the representations, warranties and covenants of the Company in this Agreement and the representations, warranties and covenants of the Purchasers in this Agreement. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 4.8 and this Section 5.8.

5.9 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City 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 therewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any Action or Proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such Action or Proceeding is improper or is an inconvenient venue for such Proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such Action or Proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for 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 other manner permitted by law. If any party shall commence an Action or Proceeding to enforce any provisions of the Transaction

Documents, then, in addition to the obligations of the Company under Section 4.8, the prevailing party in such Action or Proceeding shall be reimbursed by the non-prevailing party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such Action or Proceeding.

5.10 Survival. The representations and warranties contained herein shall survive the Closing and the issue and allotment of the Securities.

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

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

5.13 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) any of the other Transaction Documents, whenever any Purchaser exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Purchaser may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights; provided, however, that, in the case of a rescission of the conversion of any Series B-2 Convertible Preferred Stock or exercise of a Warrant, the applicable Purchaser shall be required to return any shares of Common Stock subject to any such rescinded exercise notice concurrently with the return to such Purchaser of the Series B-2 Convertible Preferred Stock converted or Warrants exercised for such shares and the restoration of such Purchaser's right to acquire such shares pursuant to such Purchaser's Series B-2 Convertible Preferred Stock or Warrant, as the case may be (including, issuance of a replacement Series B-2 Convertible Preferred Stock, or Warrant, certificate evidencing such restored right).

5.14 Replacement of Securities. If any certificate or instrument evidencing any Securities is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof (in the case of mutilation), or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction. The applicant for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs (including customary indemnity) associated with the issuance of such replacement Securities.

5.15 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of the Purchasers and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any Action for specific performance of any such obligation the defense that a remedy at law would be adequate.

5.16 Payment Set Aside. To the extent that the Company makes a payment or payments to any Purchaser pursuant to any Transaction Document or a Purchaser enforces or exercises its rights 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, 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.

5.17 Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under any Transaction Document are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance or non-performance of the obligations of any other Purchaser under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Purchaser pursuant hereto or thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Purchaser shall be entitled to independently protect and enforce its rights including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Purchaser to be joined as an additional party in any Proceeding for such purpose. Each Purchaser has been represented by its own separate legal counsel in its review and negotiation of the Transaction Documents. For reasons of administrative convenience only, each Purchaser and its respective counsel have chosen to communicate with the Company through the legal counsel of the Placement Agent. The legal counsel of the Placement Agent does not represent any of the Purchasers and only represents the Placement Agent. The Company has elected to provide all Purchasers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by any of the Purchasers. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company and a Purchaser, solely, and not between the Company and the Purchasers collectively and not between and among the Purchasers.

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

5.19 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and shares of Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

5.20 WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.

(Signature Pages Follow)

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

SHUTTLE PHARMACEUTICALS HOLDINGS, INC.

Address for Notice:

By: \_\_\_\_\_  
Name: Christopher Cooper  
Title: Chief Executive Officer

E-Mail:

With a copy to (which shall not constitute notice):

Sullivan & Worcester LLP  
Attn: David Danovitch  
Aaron Schleicher

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK  
SIGNATURE PAGE FOR PURCHASER FOLLOWS]

[PURCHASER SIGNATURE PAGES TO SECURITIES PURCHASE AGREEMENT]

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

Name of Purchaser: \_\_\_\_\_

Signature of Authorized Signatory of Purchaser: \_\_\_\_\_

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

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

Email Address of Authorized Signatory: \_\_\_\_\_

Address for Notice to Purchaser:

Address for Delivery of Securities to Purchaser (if not same as address for notice):

Subscription Amount: \$ \_\_\_\_\_

Shares of Series B-2 Convertible Preferred Stock: \_\_\_\_\_

Beneficial Ownership Blocker:  4.99%  9.99% or  19.99%

EIN Number: \_\_\_\_\_

[SIGNATURE PAGES CONTINUE]

**EXHIBIT A**

Certificate of Designations

**SHUTTLE PHARMACEUTICALS HOLDINGS, INC.  
CERTIFICATE OF DESIGNATION OF PREFERENCES,  
RIGHTS AND LIMITATIONS  
OF  
SERIES B-2 CONVERTIBLE PREFERRED STOCK**

Pursuant to Section 151 of the  
General Corporation Law of the State of Delaware

THE UNDERSIGNED DOES HEREBY CERTIFY, on behalf of Shuttle Pharmaceuticals Holdings, Inc., a Delaware corporation (the “**Corporation**”), that the following resolution was duly adopted by the Board of Directors of the Corporation (the “**Board**”), in accordance with the provisions of Section 151 of the General Corporation Law of the State of Delaware (the “**DGCL**”), pursuant to a unanimous written consent of the Board executed on April 23, 2026, in lieu of a meeting, which resolution provides for the creation of a series of the Corporation’s Preferred Stock, par value \$0.00001 per share, which is designated as “Series B-2 Convertible Preferred Stock,” with the preferences, rights and limitations set forth therein relating to dividends, conversion, redemption, dissolution and distribution of assets of the Corporation.

**WHEREAS**, the Amended and Restated Certificate of Incorporation, as amended, of the Corporation (as amended, the “**Certificate of Incorporation**”) authorizes the issuance of up to 20,000,000 shares of preferred stock, par value \$0.00001 per share, of the Corporation (“**Preferred Stock**”) in one or more series, and expressly authorizes the Board, subject to limitations prescribed by law, to provide, out of the unissued shares of Preferred Stock, for series of Preferred Stock, and, with respect to each such series, to establish and fix the number of shares to be included in any series of Preferred Stock and the designation, rights, preferences, powers, restrictions, and limitations of the shares of such series; and

**WHEREAS** it is the desire of the Board to establish and fix the number of shares to be included in a new series of Preferred Stock and the designation, rights, preferences, and limitations of the shares of such new series.

**NOW, THEREFORE, BE IT RESOLVED**, that pursuant to authority conferred upon the Board by the Certificate of Incorporation, (i) a series of Preferred Stock of the Corporation be, and hereby is authorized by the Board, (ii) the Board hereby authorizes the issuance of up to 4,000 shares of “**Series B-2 Convertible Preferred Stock**”, and (iii) the Board hereby fixes the designations, powers, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of such shares of Series B-2 Convertible Preferred Stock, as follows:

**TERMS OF SERIES B-2 CONVERTIBLE PREFERRED STOCK**

1. **Defined Terms.** For purposes hereof, the following terms shall have the following meanings:

“**Business Day**” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close; 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 are generally open for use by customers on such day.

“**Commission**” means the United States Securities and Exchange Commission.

“**Common Stock**” means the common stock, par value \$0.00001 per share, of the Corporation, and the Corporation’s stock of any other class into which such common stock or such stock of any other class may hereafter be reclassified or changed.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Holder**” means a holder of Series B-2 Convertible Preferred Stock.

“**Junior Securities**” means any class of securities that is specifically designated as junior to the Series B-2 Convertible Preferred Stock.

“**Liquidation Value**” means, with respect to any share of Series B-2 Convertible Preferred Stock on any given date, \$5,000 (as adjusted for any stock splits, stock dividends, recapitalizations, or similar transaction with respect to the Series B-2 Convertible Preferred Stock).

“**Person**” means an individual, corporation, partnership, joint venture, limited liability company, governmental authority, unincorporated organization, trust, association, or other entity.

“**Stockholder Approval**” means such approval as may be required by the applicable rules and regulations of The Nasdaq Stock Market LLC (or any successor entity) from the stockholders of the Company with respect to each of (i) the issuance of the all Conversion Shares issuable upon the conversion of the Series B-2 Convertible Preferred Stock and (ii) if necessary, a proposal to amend the Certificate of Incorporation to increase the authorized share capital of the Company to an amount sufficient to cover the Conversion Shares or to effectuate a reverse stock split whereby the authorized share capital is not split and is sufficient to cover the Conversion Shares (and such reverse split is effectuated)(the “**Capital Event**”).

“**Stockholder Approval Date**” means the date on which Stockholder Approval is received and deemed effective under Delaware law.

“**Trading Day**” means a day on which the principal Trading Market is open for business.

“**Trading Market**” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange (or any successors to any of the foregoing).

2. **Designation.** There shall be a series of Preferred Stock that shall be designated as “Series B-2 Convertible Preferred Stock” (the “**Series B-2 Convertible Preferred Stock**”) and the number of shares constituting such series shall be 2,200. The rights, preferences, powers, restrictions, and limitations of the Series B-2 Convertible Preferred Stock shall be as set forth herein.

3. **Voting.**

3.1 Except as otherwise provided herein or as otherwise required by the DGCL, the Series B-2 Convertible Preferred Stock shall have no voting rights. However, as long as any shares of Series B-2 Convertible Preferred Stock are outstanding, the Corporation shall not, without the written consent or affirmative vote of the holders of a majority of the then outstanding shares of the Series B-2 Convertible Preferred Stock: (i) alter or change adversely the powers, preferences or rights given to the Series B-2 Convertible Preferred Stock or alter or amend this Certificate of Designation, amend or repeal any provision of, or add any provision to, the Certificate of Incorporation or bylaws of the Corporation, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of Preferred Stock, in each case if any such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Series B-2 Convertible Preferred Stock, regardless of whether any of the foregoing actions shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation, recapitalization, reclassification, conversion or otherwise, or (ii) enter into any agreement with respect to any of the foregoing.

3.2 Any vote required or permitted hereunder or required by applicable law may be taken at a meeting of the Holders or through an action by written consent in lieu of such meeting in accordance with Section 228 of the DGCL.

4. **Dividends.** No dividends shall be paid on shares of Series B-2 Convertible Preferred Stock, except as required by applicable law.

5. **Rank; Liquidation.**

5.1. With respect to distribution of assets upon liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, all shares of Series B-2 Convertible Preferred Stock shall rank:

(i) senior to all Junior Securities; (ii) on parity with the Common Stock, the Corporation's Series B-1 Convertible Preferred Stock, and any other class or series of Preferred Stock of the Corporation hereafter created specifically ranking, by its terms, on parity with the Series B-2 Convertible Preferred Stock (the "**Parity Securities**"); and (iii) junior to any other class or series of Preferred Stock or other capital stock of the Corporation hereafter created specifically ranking, by its terms, senior to the Series B-2 Convertible Preferred Stock (collectively, the "**Senior Securities**").

5.2. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a "**Liquidation**"), each Holder shall be entitled, together pro rata with the holders of Parity Securities, to be paid out of the assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Junior Securities by reason of their ownership thereof, an amount in cash equal to the aggregate Liquidation Value of all shares of Series B-2 Convertible Preferred Stock held by such Holder. For the avoidance of any doubt, a Fundamental Transaction (as defined below) shall not be deemed a Liquidation unless the Corporation expressly declares that such Fundamental Transaction shall be treated as if it were a Liquidation.

6. **Redemption.** The Series B-2 Convertible Preferred Stock shall have no redemption rights; provided, however, that the foregoing shall not limit the ability of the Corporation to purchase or otherwise deal in such shares to the extent otherwise permitted hereby and by law.

#### 7. **Conversion.**

7.1 **Automatic and Optional Conversions.** The shares of Series B-2 Convertible Preferred Stock shall be convertible into shares of Common Stock (the "**Conversion Shares**") as follows:

7.1.1 **Automatic Conversion.** Each share of Series B-2 Convertible Preferred Stock shall be convertible into Conversion Shares, automatically, irrevocably and without an action required on the part of the Corporation or the Holder thereof, within three (3) Business Days after the date that the Corporation's stockholders approve the conversion of the Series B-2 Convertible Preferred Stock into shares of Common Stock in accordance with the listing rules of the Trading Market (the "**Stockholder Approval**").

7.1.2 Effective as of 9:00 a.m. Eastern time on the third (3<sup>rd</sup>) Business Day after the Stockholder Approval Date, the outstanding shares of Series B-2 Convertible Preferred Stock held by each Holder thereof shall, without any further action on the part of the Corporation or such Holder, automatically and irrevocably convert into such number of duly authorized, validly issued, fully paid and non-assessable Conversion Shares equal to the Conversion Ratio, subject to the Beneficial Ownership Limitation (as defined below) set forth in Section 7.3 (an "**Automatic Conversion**"). The initial conversion price per Share (the "**Conversion Price**") shall be equal to \$1.03, subject to adjustment as applicable in accordance with Section 8.

In determining the application of the Beneficial Ownership Limitations solely with respect to an Automatic Conversion, the Corporation shall calculate beneficial ownership for each Holder assuming beneficial ownership by such Holder of (x) the number of shares of Common Stock issuable to such Holder in such Automatic Conversion, plus (y) any additional shares of Common Stock for which a Holder has provided the Corporation with prior written notice of beneficial ownership within at least two (2) Business Days prior to the Stockholder Approval Date (a "**Beneficial Ownership Statement**") and assuming the conversion of all shares of Series B-2 Convertible Preferred Stock held by all other Holders less the aggregate number of shares of Series B-2 Convertible Preferred Stock held by all other Holders that will not convert into shares of Common Stock on account of the application of any Beneficial Ownership Limitations applicable to any such other Holders. If a Holder fails to provide the Corporation with a Beneficial Ownership Statement within two (2) Business Days prior to the Stockholder Approval Date, then the Corporation shall presume the Holder's beneficial ownership of Common Stock (excluding the Conversion Shares) to be zero. The shares of Series B-2 Convertible Preferred Stock that are converted in an Automatic Conversion are referred to as the "**Converted Stock**."

(a) Converted Stock that is registered in book entry form shall be automatically converted upon the Automatic Conversion into the corresponding Conversion Shares, which shares shall be issued in book entry form and without any action on the part of the Holders.

(b) Converted Stock that is issued in certificated form shall be automatically converted upon the Automatic Conversion into the corresponding Conversion Shares and any certificate that formerly represented the Converted Stock shall be deemed to represent the Conversion Shares into which the Converted Stock shall have been automatically converted. For the avoidance of doubt, upon the Automatic Conversion, all shares of Series B-2 Convertible Preferred Stock to be converted thereby shall be converted, whether or not any physical certificate(s) representing the Converted Stock shall have been delivered to the Corporation in advance thereof.

(c) Whether or not the Converted Stock is in book-entry or certificated form, upon the Automatic Conversion, the Holder thereof shall cease to have any rights as holder of shares of Series B-2 Convertible Preferred Stock, except for the right to receive the Conversion Shares into which the Converted Stock has been converted in accordance with the terms of this Certificate of Designation. Notwithstanding the foregoing and the automatic conversion of the Converted Stock upon the Automatic Conversion, Holders of Converted Stock shall continue to have any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Corporation to comply with the terms of this Certificate of Designation. In all cases, the Holder shall retain all of its rights and remedies for the Corporation's failure to convert the Converted Stock in accordance with the terms of this Certificate of Designation.

7.1.2 **Optional Conversion Following Stockholder Approval Date.** Subject to Section 7.1.1 and Section 7.3, at any time and from time to time as of 5:00 p.m. Eastern Time on the first (1st) Business Day after the Stockholder Approval Date, each Holder of shares of Series B-2 Convertible Preferred Stock that were not converted in the Automatic Conversion due to the Beneficial Ownership Limitation may, at its option, effect conversions of one or more shares of such Holder's Series B-2 Convertible Preferred Stock into a number of shares of Common Stock equal to the Conversion Ratio (each, an "**Optional Conversion**") by delivering to the Corporation a form of conversion notice attached hereto as Annex A (a "**Notice of Conversion**"), duly completed and executed. The date on which an Optional Conversion shall be deemed effective (the "**Conversion Date**") shall be close of business on the Trading Day that the Notice of Conversion, completed and executed, is sent via email to such other email address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with Section 11, and received during regular business hours by, the Corporation.

7.2. **Conversion Ratio.** The "**Conversion Ratio**" for each share of Series B-2 Convertible Preferred Stock shall be 4,854 shares of Common Stock issuable upon the conversion of each share of Series B-2 Convertible Preferred Stock (corresponding to a ratio of 4,854:1), subject in each case to adjustment as provided herein.

7.3. **Beneficial Ownership Limitation.** Notwithstanding anything herein to the contrary, no conversion of a share of Series B-2 Convertible Preferred Stock shall be effective, and a Holder shall not have the right to convert any portion of the Series B-2 Convertible Preferred Stock, to the extent that, after giving effect to an attempted or proposed conversion pursuant to the Automatic Conversion or pursuant to an Optional Conversion as set forth on an applicable Notice of Conversion, as the case may be, such Holder (together with any other Person whose beneficial ownership of Common Stock would be aggregated with such Holder's for purposes of Section 13(d) or Section 16 of the Exchange Act and the applicable regulations of the Commission, including any "group" of which the Holder is a member (the foregoing, "**Attribution Parties**")) would beneficially own a number of shares of Common Stock in excess of the Beneficial Ownership Limitation. For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Series B-2 Convertible Preferred Stock subject to the Automatic Conversion or the Notice of Conversion, as applicable, with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (A) conversion of the remaining, unconverted Series B-2 Convertible Preferred Stock beneficially owned by such Holder or any of its Attribution Parties, and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation (including any warrants) beneficially owned by such Holder or any of its Attribution Parties that are subject to a limitation on conversion or exercise similar to the limitation contained herein. For purposes of this Section 7.3, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the applicable regulations of the Commission. In addition, for purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and the applicable regulations of the Commission. For purposes of this Section 7.3, in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (A) the Corporation's most recent periodic or annual filing with the Commission, as the case may be, (B) a more recent public announcement by the Corporation that is filed with the Commission, or (C) a more recent notice by the Corporation or the Corporation's transfer agent to the Holder setting forth the number of shares of Common Stock then outstanding. Upon the written request of a Holder (which may be by email), the Corporation shall, within three (3) Trading Days thereof, confirm in writing to such Holder (which may be via email) 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 any actual conversion or exercise of securities of the Corporation, including shares of Series B-2 Convertible Preferred Stock, by such Holder or its Attribution Parties since the date as of which such number of outstanding shares of Common Stock was last publicly reported or confirmed to the Holder. The "**Beneficial Ownership Limitation**" shall initially be set at 4.99% for each Holder and its Attribution Parties and may be adjusted at the discretion of the Holder to a number between 4.99% and 19.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock pursuant to the Automatic Conversion or such Notice of Conversion (as applicable), to the extent permitted pursuant to this Section 7.3. In the case of any Optional Conversion, the Corporation shall be entitled to rely on representations made to it by the Holder in any Notice of Conversion regarding its Beneficial Ownership Limitation. Notwithstanding the foregoing, by written notice to the Corporation, (i) which will not be effective until the sixty-first (61st) day after such written notice is delivered to the Corporation, the Holder may reset the Beneficial Ownership Limitation percentage to a higher percentage, not to exceed 9.9%, to the extent then applicable and (ii) which will be effective immediately after such notice is delivered to the Corporation, the Holder may reset the Beneficial Ownership Limitation percentage to a lower percentage (but in no event less than 4.9%). Upon such a change by a Holder of the Beneficial Ownership Limitation, the Beneficial Ownership Limitation may not be further amended by such Holder without first providing the minimum notice required by this Section 7.3.

#### 7.4. **Mechanics of Conversion.**

7.4.1 **Delivery of Certificate or Electronic Issuance Upon Conversion.** Not later than one (1) Trading Day after the applicable Conversion Date (the "**Share Delivery Date**"), the Corporation shall either: (a) in the event that the Holder has so elected in a Notice of Conversion, deliver, or cause to be delivered, to such Holder a physical certificate or certificates representing the number of Conversion Shares being acquired upon the conversion of the shares of Series B-2 Convertible Preferred Stock or (b) otherwise shall deliver, or cause to be delivered, to such Holder, documentation of the book entry for the number of Conversion Shares being acquired pursuant to the conversion.

7.4.2 **Reservation of Shares Issuable Upon Conversion.** The Corporation covenants that, following the occurrence of a Capital Event and thereafter for so long as any Series B-2 Convertible Preferred Stock remains issued and outstanding, the Corporation will reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of outstanding shares of Series B-2 Convertible Preferred Stock, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holders of the Series B-2 Convertible Preferred Stock, not less than such aggregate number of shares of the Common Stock as shall be equal to the number of shares of Common Stock issuable (taking into account the adjustments of Section 8) upon the conversion of all outstanding shares of Series B-2 Convertible Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and non-assessable.

**7.4.3 Fractional Shares.** No fractional shares or scrip representing fractional shares of Common Stock shall be issued upon conversion of the Series B-2 Convertible Preferred Stock. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Corporation shall round such fraction of a share of Common Stock up to the nearest whole share. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series B-2 Convertible Preferred Stock the Holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

**7.4.4 Transfer Taxes.** The delivery of certificates or book-entry documentation representing shares of the Common Stock upon conversion of the Series B-2 Convertible Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the delivery of such certificates; provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the delivery of any such certificate, or any registration of book-entry shares, upon conversion in a name other than that of the registered Holder(s) of such shares of Series B-2 Convertible Preferred Stock and the Corporation shall not be required to deliver such certificates unless or until the Person or Persons requesting the delivery thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid.

**7.5. Status as Stockholder.** Upon each conversion of shares of Series B-2 Convertible Preferred Stock, (i) such shares of Series B-2 Convertible Preferred Stock being converted shall automatically convert into shares of Common Stock and (ii) the applicable Holder's rights as a holder of such converted shares of Series B-2 Convertible Preferred Stock shall cease and terminate, excepting only the right to receive certificates or book-entry documentation for such shares of Common Stock in the manner provided herein and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Corporation to comply with the terms of this Certificate of Designation. In all cases, each applicable Holder shall retain all of its rights and remedies for the Corporation's failure to convert Series B-2 Convertible Preferred Stock in accordance with terms of this Certificate of Designation. In no event shall the Series B-2 Convertible Preferred Stock convert into shares of Common Stock prior to the Stockholder Approval.

## **8. Certain Adjustments.**

**8.1. Stock Dividends and Stock Splits.** If the Corporation, at any time while any Series B-2 Convertible Preferred Stock is outstanding, pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of the Series B-2 Convertible Preferred Stock) with respect to the then outstanding shares of Common Stock, the Conversion Price in effect immediately prior to any such dividend or distribution shall be proportionately reduced and the number of Conversion Shares issuable upon conversion of the Series B-2 Convertible Preferred Stock shall be proportionately increased. If the Corporation, at any time while any Series B-2 Convertible Preferred Stock is outstanding, (A) subdivides outstanding shares of Common Stock into a larger number of shares or (B) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, then the Conversion Ratio shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately after such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately before such event (excluding any treasury shares of the Corporation). Any adjustment made pursuant to this Section 8.1 shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision or combination.

**8.2. Adjustment Upon Issuance of Shares of Common Stock.** If and whenever on or after the Closing, the Company grants, issues or sells (or enters into any agreement to grant, issue or sell), or in accordance with this Section 8 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 securities granted issued or sold or deemed to have been granted issued or sold pursuant to an Exempt Issuance) 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 8.2), the following shall be applicable:

**8.2.1. Issuance of Options.** If the Company in any manner grants, issues or sells (or enters into any agreement to grant, issue or sell) any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities (as defined below) (collectively, "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 8.2.1, 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 (including, without limitation, consideration consisting of cash, debt forgiveness, assets or any other property) 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 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.

**8.2.2. Issuance of Convertible Securities.** If the Company in any manner issues or sells (or enters into any agreement to issue or sell) 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 ("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 8.2.2, 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 (including, without limitation, any consideration consisting of cash, debt forgiveness, assets or other property) 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 8.2, except as contemplated below, no further adjustment of the Conversion Price shall be made by reason of such issuance or sale.

**8.2.3. 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 8.2), 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 that 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 8.2.2, 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 8.2 shall be made if such adjustment would result in an increase of the Conversion Price then in effect.

**8.2.4. 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 8.1.2 or 8.1.2 above and (z) the lowest closing price 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 Series B-2 Convertible Preferred Stock is converted, on any given Conversion Date during any such Adjustment Period, solely with respect to such portion of the Series B-2 Convertible Preferred Stock 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 (for the purpose of determining the consideration paid for such Common Stock, Option or Convertible Security) 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 (for the purpose of determining the consideration paid for such Common Stock, Option or Convertible Security) 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 closing price 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 (for the purpose of determining the consideration paid for such Common Stock, Option or Convertible Security) 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 (10<sup>th</sup>) 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.

8.2.5. **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).

8.3. **Fundamental Transaction.** If, at any time while the Series B-2 Convertible Preferred Stock is outstanding, (A) the Corporation effects any merger or consolidation of the Corporation with or into another Person or any stock sale to, or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, share exchange or scheme of arrangement) with or into another Person (other than any such transaction in which the Corporation is the surviving or continuing entity and the outstanding shares of its Common Stock are not exchanged for or converted into other securities, cash or property), (B) the Corporation effects any sale, lease, transfer or exclusive license of all or substantially all of its assets in one transaction or a series of related transactions, (C) any tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which more than 50% of the Common Stock not held by the Corporation or such Person is exchanged for or converted into other securities, cash or property, or (D) the Corporation effects any reclassification of the Common Stock or any compulsory share exchange pursuant (other than as a result of a dividend, subdivision or combination covered by Section 6.1 above) to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (in any such case, a "Fundamental Transaction"), then, upon any subsequent conversion of the Series B-2 Convertible Preferred Stock the Holders shall have the right to receive, in lieu of the right to receive Conversion Shares, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction, the same kind and amount of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of one (1) share of Common Stock (the "Alternate Consideration"). For purposes of any such subsequent conversion, the determination of the Conversion Ratio shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one (1) share of Common Stock in such Fundamental Transaction, and the Corporation shall adjust the Conversion Ratio in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holders shall be given the same choice as to the Alternate Consideration it receives upon any conversion of the Series B-2 Convertible Preferred Stock following such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new certificate of designations with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders' right to convert such preferred stock into Alternate Consideration. The terms of any agreement to which the Corporation is a party and pursuant to which a Fundamental Transaction is effected shall include terms requiring any such successor or surviving entity to comply with the provisions of this Section 8.3 and insuring that the Series B-2 Convertible Preferred Stock (or any such replacement security) will be similarly adjusted upon any subsequent transaction analogous to a Fundamental Transaction. The Corporation shall cause to be delivered to each Holder, at its last address as it shall appear upon the stock books of the Corporation, written notice of any Fundamental Transaction at least twenty (20) calendar days prior to the date on which such Fundamental Transaction is expected to become effective or close.

8.4. **Conversion Floor Price.** Notwithstanding the foregoing, no adjustments shall be made to the extent the Conversion Price as so adjusted would be less than the Floor Price. For purposes hereof, "Floor Price" means \$0.21 (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the date of the Purchase Agreement).

9. **Transfer.** A Holder may transfer any shares of Series B-2 Convertible Preferred Stock, held by such Holder without the consent of the Corporation; provided that such transfer is in compliance with applicable securities laws. The Corporation shall in good faith (i) do and perform, or cause to be done and performed, all such further acts and things, and (ii) execute and deliver all such other agreements, certificates, instruments and documents, in each case, as any Holder may reasonably request in order to carry out the intent and accomplish the purposes of this Section 9.

10. **Series B-2 Convertible Preferred Stock Register.** The Corporation shall maintain at its principal executive offices (or such other office or agency of the Corporation as it may designate by notice to the Holders in accordance with Section 11), a register for the Series B-2 Convertible Preferred Stock, in which the Corporation shall record, in addition to any information otherwise required by law to be set forth on such register, (i) the name, address, electronic mail address of each Holder in whose name the shares of Series B-2 Convertible Preferred Stock have been issued and (ii) the name, address, electronic mail address of each transferee of any shares of Series B-2 Convertible Preferred Stock. The Corporation may treat the person in whose name any share of Series B-2 Convertible Preferred Stock is registered on the register as the owner and holder thereof for all purposes.

11. **Notices.** Any and all notices or other communications or deliveries to be provided to the Corporation hereunder, including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, via email or sent by a nationally recognized overnight courier service, addressed to Shuttle Pharmaceuticals Holdings, Inc., at 401 Professional Drive, Suite 260, Gaithersburg, MD 20879, Attention: Chief Executive Officer, email: cooper@venturefirst1.com, or such other email address or mailing address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section 11. Any and all notices or other communications or deliveries to be provided to a Holder hereunder shall be in writing and delivered personally, by email at the email address of such Holder appearing on the books of the Corporation, or if no such email address appears on the books of the Corporation, sent by a nationally recognized overnight courier service addressed to such Holder, at the address on the records of the Corporation. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section 11 prior to 5:30 p.m. Eastern Time on any date, (ii) the date immediately following the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section 11 between 5:30 p.m. and 11:59 p.m. Eastern Time on any date, (iii) the second (2nd) Business Day following the date of mailing, if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

12. **Book-Entry: Certificates.** The Series B-2 Convertible Preferred Stock will be uncertificated and issued in book-entry form. To the extent that any shares of Series B-2 Convertible Preferred Stock are issued in book-entry form, references herein to "certificates" shall instead refer to the book-entry notation relating to such shares.

13. **Lost or Mutilated Series B-2 Convertible Preferred Stock Certificate.** If any certificate representing a Holder's Series B-2 Convertible Preferred Stock shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Series B-2 Convertible Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership thereof reasonably satisfactory to the Corporation and, in each case, customary and reasonable indemnity, if requested by the Corporation. Applicants for a new certificate under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Corporation may prescribe.

14. **Waiver.** Notwithstanding any provision in this Certificate of Designation to the contrary, any provision contained in this Certificate of Designation and any right of the Holders of Series B-2 Convertible Preferred Stock granted under this Certificate of Designation may be waived as to all shares of Series B-2 Convertible Preferred Stock (and the Holders thereof) upon the written consent of the Holders of not less than a majority of the shares of Series B-2 Convertible Preferred Stock then outstanding, unless a higher percentage is expressly required by the DGCL, in which case the written consent of the Holders of not less than such higher percentage shall be required.

15. **Severability.** Whenever possible, each provision hereof shall be interpreted in a manner as to be effective and valid under applicable law, but if any provision hereof is held to be prohibited by or invalid under applicable law, then such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating or otherwise adversely affecting the remaining provisions hereof.

16. **Status of Converted Series B-2 Convertible Preferred Stock.** If any shares of Series B-2 Convertible Preferred Stock shall be converted or repurchased by the Corporation, such shares shall be retired and, upon retirement, resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series B-2 Convertible Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, Shuttle Pharmaceuticals Holdings, Inc. has caused this Certificate of Designation of Preferences, Rights and Limitations of Series B-2 Convertible Preferred Stock to be duly executed by its Chief Executive Officer on April 30, 2026.

SHUTTLE PHARMACEUTICALS HOLDINGS, INC.

By: /s/ Christopher Cooper  
Name: Christopher Cooper  
Title: Chief Executive Officer

[Signature Page to Series B-2 Preferred Stock Certificate of Designation]

ANNEX A  
NOTICE OF CONVERSION

(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER TO CONVERT  
SHARES OF  
SERIES B-2 CONVERTIBLE PREFERRED STOCK)

The undersigned Holder hereby irrevocably elects to convert the number of shares of Series B-2 Convertible Preferred Stock, \$0.00001 par value per share (the "Series B-2 Convertible Preferred Stock"), of Shuttle Pharmaceuticals Holdings, Inc., a Delaware corporation (the "Corporation"), indicated below, represented in book-entry form, into shares of common stock, \$0.00001 par value per share (the "Common Stock"), of the Corporation, as of the date written below. If securities are to be issued in the name of a person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto. Capitalized terms utilized but not defined herein shall have the meaning ascribed to such terms in that certain Certificate of Designation of Preferences, Rights and Limitations of Series B-2 Convertible Preferred Stock (the "Certificate of Designation") filed by the Corporation with the Secretary of State of the State of Delaware on May 1, 2026.

CONVERSION CALCULATIONS:

Date to Effect Conversion: \_\_\_\_\_

Number of shares of Series B-2 Convertible Preferred Stock owned prior to Conversion: \_\_\_\_\_

Number of shares of Series B-2 Convertible Preferred Stock to be Converted: \_\_\_\_\_

Number of shares of Common Stock to be Issued: \_\_\_\_\_

Address for delivery of physical certificates: \_\_\_\_\_

For DWAC Delivery, please provide the following:

Broker No.: \_\_\_\_\_

Account No.: \_\_\_\_\_

[HOLDER]

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EXHIBIT B**

Form of Common Warrant

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

**COMMON STOCK PURCHASE WARRANT**

**SHUTTLE PHARMACEUTICALS HOLDINGS, INC.**

Warrant Shares: [ ]

Issue Date: [ ], 2026

THIS COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, [ ] or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date on which Stockholder Approval (as defined below) is received and deemed effective under Delaware law (the "Initial Exercise Date") and on or prior to 5:00 p.m. (New York City time) on [TERMINATION DATE]<sup>1</sup> (the "Termination Date") but not thereafter, to subscribe for and purchase from Shuttle Pharmaceuticals Holdings, Inc., a Delaware corporation (the "Company"), up to [ ] shares (as subject to adjustment hereunder, the "Warrant Shares") of the Company's Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b). "Stockholder Approval" means such approval as may be required by the applicable rules and regulations of The Nasdaq Stock Market LLC (or any successor entity) from the stockholders of the Company with respect to each of (i) the issuance of the all Warrant Shares issuable upon the exercise of the Warrants and (ii) if necessary, a proposal to amend the certificate of incorporation to increase the authorized share capital of the Company to an amount sufficient to cover the Warrant Shares or to effectuate a reverse stock split whereby the authorized shares capital is not split and is sufficient to cover the Warrant Shares (and such reverse split is effectuated)(the "Capital Event").

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Securities Purchase Agreement (the "Purchase Agreement"), dated April 30, 2026, among the Company and the purchasers signatory thereto.

<sup>1</sup> Three (3) years from the date of the Purchase Agreement

Section 2. Exercise.

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

b) Exercise Price. The exercise price per share of Common Stock under this Warrant shall be \$1.03, subject to adjustment hereunder (the "Exercise Price").

c) Cashless Exercise. This Warrant may also be exercised, in whole or in part, at such time by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) \* (X)] by (A), where:

(A) = as applicable: (i) the closing price of the Common Stock on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b)(68) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) the closing price of the Common Stock on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is executed during "regular trading hours" or (iii) the closing price of the Common Stock on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of "regular trading hours" on such Trading Day;

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

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

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's or its designee's balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144 (assuming cashless exercise of the Warrants), and otherwise by physical delivery of a

certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) two (2) Trading Days after the delivery to the Company of the Notice of Exercise, (ii) one (1) Trading Day after delivery of the aggregate Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise (such date, the "Warrant Share Delivery Date"). Upon delivery of the Notice of Exercise, 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 of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) one (1) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise.

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

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

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

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

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

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

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within one (1) Trading Day confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any Warrants, 9.99% or 19.99%) of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 19.99% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) that may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant. To the extent that this Warrant is unexercisable as a result of the Holder's Beneficial Ownership Limitation, no alternate consideration is owing to the Holder.

### Section 3. Certain Adjustments.

a) Stock Dividends and Splits. Without limiting any provision of this Section 3, if the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues by reclassification of shares of Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Adjustment Upon Issuance of Shares of Common Stock. If and whenever on or after the Closing, the Company grants, issues or sells (or enters into any agreement to grant, issue or sell), or in accordance with this Section 3 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 securities granted issued or sold or deemed to have been granted issued or sold pursuant to an Exempt Issuance) 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. For all purposes of the foregoing (including, without limitation, determining the adjusted Exercise Price and the New Issuance Price under this Section 3(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 rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities (as defined below) (collectively, "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 3(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 (including, without limitation, consideration consisting of cash, debt forgiveness, assets or any other property) 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.

ii. Issuance of Convertible Securities. If the Company in any manner issues or sells (or enters into any agreement to issue or sell) 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 ("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 3(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 (including, without limitation, any consideration consisting of cash, debt forgiveness, assets or other property) 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 3(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 3(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 3(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 3(b) shall be made if such adjustment would result in an increase of the Exercise 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 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 3(b)(i) or 3(b)(ii) above and (z) the lowest closing price 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 converted 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 (for the purpose of determining the consideration paid for such Common Stock, Option or Convertible Security) 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 (for the purpose of determining the consideration paid for such Common Stock, Option or Convertible Security) 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 closing price 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 (for the purpose of determining the consideration paid for such Common Stock, Option or Convertible Security) 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 (10<sup>th</sup>) 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) Reserved.

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

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

f) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person (excluding mergers effected solely to change the Company's name), (ii) the Company (and all of its Subsidiaries, taken as a whole), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of more than 50% of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common

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

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

h) Notice to Holder.

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

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by email to the Holder at its last email address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

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i) Exercise Floor Price. Notwithstanding the foregoing, no adjustments shall be made to the extent the Exercise Price as so adjusted would be less than the Floor Price. For purposes hereof, “Floor Price” means \$0.21 (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the date of the Purchase Agreement).

Section 4. Transfer of Warrant.

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

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

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

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d) Transfer Restrictions. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant, as the case may be, comply with the provisions of Section 5.7 of the Purchase Agreement.

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

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise; No Settlement in Cash. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3. Without limiting the rights of a Holder to receive Warrant Shares on a “cashless exercise,” and to receive the cash payments contemplated pursuant to Sections 2(d)(i) and 2(d)(iv), in no event will the Company be required to net cash settle an exercise of this Warrant.

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

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

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d) Authorized Shares.

The Company covenants that, following the occurrence of a Capital Event and thereafter during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any subscription rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the subscription rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the subscription rights represented by this Warrant will, upon exercise of the subscription rights represented by this Warrant and payment of the Exercise Price for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue). Except and to the extent as waived or consented to by the holders of a majority of the then outstanding Warrants (based on the number of Warrant Shares underlying such Warrants), the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be necessary to enable the Company to perform its obligations under this Warrant. Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

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

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

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

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

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

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

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

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company, on the one hand, and the Holder of this Warrant, on the other hand.

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

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

(Signature Page Follows)

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

**SHUTTLE PHARMACEUTICALS HOLDINGS, INC.**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: Chief Executive Officer

(Signature Page to the Pre Funded Warrant)

**NOTICE OF EXERCISE**

TO: **SHUTTLE PHARMACEUTICALS HOLDINGS, INC.**

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

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

in lawful money of the United States; or

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

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

\_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

Signature of Authorized Signatory of Investing Entity: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

**EXHIBIT B**

**ASSIGNMENT FORM**

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

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

Name: \_\_\_\_\_  
(Please Print)

Address: \_\_\_\_\_  
(Please Print)

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Dated: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature: \_\_\_\_\_

Holder's Address: \_\_\_\_\_

**EXHIBIT C**

**Form of Pre-Funded Warrant**

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

**PRE-FUNDED COMMON STOCK PURCHASE WARRANT**

**SHUTTLE PHARMACEUTICALS HOLDINGS, INC.**

Warrant Shares: [ ] Issue Date: [ ], 2026  
Initial Exercise Date: [ ], 2026

THIS PRE-FUNDED COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, [ ] or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date set forth herein but in no case prior to the date on which Stockholder Approval (as defined below) is received and deemed effective under Delaware Law (the "Initial Exercise Date") and until this Warrant is exercised in full (the "Termination Date") but not thereafter, to subscribe for and purchase from Shuttle Pharmaceuticals Holdings, Inc., a Delaware corporation (the "Company"), up to [ ] shares (as subject to adjustment hereunder, the "Warrant Shares") of the Company's Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b). "Stockholder Approval" means such approval as may be required by the applicable rules and regulations of The Nasdaq Stock Market LLC (or any successor entity) from the stockholders of the Company with respect to each of (i) the issuance of the all Warrant Shares issuable upon the exercise of the Warrants and (ii) if necessary, a proposal to amend the certificate of incorporation to increase the authorized share capital of the Company to an amount sufficient to cover the Warrant Shares or to effectuate a reverse stock split whereby the authorized shares capital is not split and is sufficient to cover the Warrant Shares (and such reverse split is effectuated)(the "Capital Event").

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Securities Purchase Agreement (the "Purchase Agreement"), dated April 30, 2026, among the Company and the purchasers signatory thereto.

Section 2. Exercise.

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

b) Exercise Price. The aggregate exercise price of this Warrant, except for a nominal exercise price of \$0.001 per Warrant Share, was pre-funded to the Company on or prior to the Initial Exercise Date and, consequently, no additional consideration (other than the nominal exercise price of \$0.001 per Warrant Share) shall be required to be paid by the Holder to any Person to effect any exercise of this Warrant. The Holder shall not be entitled to the return or refund of all, or any portion, of such pre-paid aggregate exercise price under any circumstance or for any reason whatsoever. The remaining unpaid exercise price per share of Common Stock under this Warrant shall be \$0.001, subject to adjustment hereunder (the "Exercise Price").

c) Cashless Exercise. This Warrant may also be exercised, in whole or in part, at such time by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) \* (X)] by (A), where:

(A) = as applicable: (i) the closing price of the Common Stock on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b)(68) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) the closing price of the Common Stock on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is executed during "regular trading hours" or (iii) the closing price of the Common Stock on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and

such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of "regular trading hours" on such Trading Day;

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

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

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's or its designee's balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144 (assuming cashless exercise of the Warrants), and otherwise by physical delivery of a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) two (2) Trading Days after the delivery to the Company of the Notice of Exercise, (ii) one (1) Trading Day after delivery of the aggregate Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise (such date, the "Warrant Share Delivery Date"). Upon delivery of the Notice of Exercise, 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 of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) one (1) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise.

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

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

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

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

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

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

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within one (1) Trading Day confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any Warrants, 9.99% or 19.99%) of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 19.99% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) that may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant. To the extent that this Warrant is unexercisable as a result of the Holder's Beneficial Ownership Limitation, no alternate consideration is owing to the Holder.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues by reclassification of shares of Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after

such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

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

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

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

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

f) **Notice to Holder.**

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

ii. **Notice to Allow Exercise by Holder.** If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by email to the Holder at its last email address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

**Section 4. Transfer of Warrant.**

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

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

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

d) **Transfer Restrictions.** If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective

registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant, as the case may be, comply with the provisions of Section 5.7 of the Purchase Agreement.

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

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Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise; No Settlement in Cash. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3. Without limiting the rights of a Holder to receive Warrant Shares on a "cashless exercise," and to receive the cash payments contemplated pursuant to Sections 2(d)(i) and 2(d)(iv), in no event will the Company be required to net cash settle an exercise of this Warrant.

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

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

d) Authorized Shares.

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

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

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

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

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

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

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

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

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

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

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company, on the one hand, and the Holder of this Warrant, on the other hand.

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

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

*(Signature Page Follows)*

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

**SHUTTLE PHARMACEUTICALS HOLDINGS, INC.**

By: \_\_\_\_\_  
Name:  
Title: Chief Executive Officer

*(Signature Page to the Pre Funded Warrant)*

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NOTICE OF EXERCISE

TO: SHUTTLE PHARMACEUTICALS HOLDINGS, INC.

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

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

in lawful money of the United States; or

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

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

\_\_\_\_\_

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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

Signature of Authorized Signatory of Investing Entity: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

EXHIBIT B

ASSIGNMENT FORM

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

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

Name: \_\_\_\_\_  
(Please Print)

Address: \_\_\_\_\_  
(Please Print)

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Dated: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature: \_\_\_\_\_

Holder's Address: \_\_\_\_\_

## PLACEMENT AGENCY AGREEMENT

April 30, 2026

**PERSONAL AND CONFIDENTIAL**

Shuttle Pharmaceuticals Holdings, Inc.  
401 Professional Drive, Suite 260  
Gaithersburg, MD 20879

Attention: Christopher Cooper, Interim Chief Executive Officer

Dear Mr. Cooper:

This agreement (the "**Agreement**") constitutes the agreement between E.F. Hutton & Co. (the "**Placement Agent**") on one hand, and Shuttle Pharmaceuticals Holdings, Inc., a Delaware corporation (the "**Company**") and each of the Company and the Placement Agent, a "**Party**" and, together, the "**Parties**") on the other hand, pursuant to which the Placement Agent shall serve as the exclusive placement agent for the Company, on a "reasonable best efforts" basis, in connection with the proposed placement (the "**Placement**") of 2,200 shares (the "**Shares**") of the Company's Series B-2 Convertible Preferred Stock, par value \$0.00001 per share (the "**Series B-2 Convertible Preferred Stock**") and common stock purchase warrants (the "**Common Warrants**") to purchase one hundred percent (100%) of the number of shares of common stock, par value \$0.00001 per share ("**Common Stock**"), underlying the Series B-2 Convertible Preferred Stock. The Shares and Common Warrants are collectively referred to herein as the "**Securities**". Securities will be offered pursuant to an exemption from the registration requirements of Section 5 of the Securities Act contained in Section 4(a)(2) thereof and/or Regulation D thereunder. The terms of the Placement and the Securities shall be mutually agreed upon by the Company and the purchasers (each, a "**Purchaser**" and collectively, the "**Purchasers**") and nothing herein constitutes that the Placement Agent would have the power or authority to bind the Company or any Purchaser or an obligation for the Company to issue any Securities or complete the Placement. This Agreement and the documents executed and delivered by the Company and the Purchasers in connection with the Placement, including, without limitation, a securities purchase agreement (the "**Purchase Agreement**") and Warrant certificates, are collectively referred to as the "**Transaction Documents**." The closing of the Placement shall be referred to herein as the "**Closing**" and the date of the Closing shall be referred to herein as the "**Closing Date**." The Placement Agent may retain other brokers or dealers to act as sub-agents or selected-dealers on its behalf in connection with the Placement.

The Company expressly acknowledges and agrees that the Placement Agent's obligations hereunder are on a reasonable best efforts basis only and that the execution of this Agreement does not constitute a commitment by the Placement Agent to purchase the Securities and does not ensure the successful placement of the Securities or any portion thereof or the success of the Placement Agent with respect to securing any other financing on behalf of the Company. With the prior written consent of the Company, the Placement Agent may retain other brokers or dealers to act as sub-agents or selected-dealers on its behalf in connection with the Placement. Capitalized terms that are not otherwise defined herein have the meanings given to such terms in the Purchase Agreement.

The Company hereby confirms its agreement with the Placement Agent as follows:

**Section 1. Agreement to Act as Placement Agent.**

(a) On the basis of the representations, warranties, and agreements of the Company herein contained, and subject to all the terms and conditions of this Agreement, the Placement Agent shall be the exclusive placement agent in connection with the Placement to be subject to market conditions and negotiations between the Company, the Placement Agent, and the prospective Purchasers. The Placement Agent will act on a reasonable best efforts basis and the Company agrees and acknowledges that there is no guarantee of the successful placement of the Securities, or any portion thereof, in the prospective Placement. Under no circumstances will the Placement Agent or any of its "Affiliates" (as defined below) be obligated to underwrite or purchase any of the Securities for its own account or otherwise provide any financing. The Placement Agent shall act solely as the Company's agent and not as principal. The Placement Agent shall have no authority to bind the Company with respect to any prospective offer to purchase Securities and the Company shall have the sole right to accept offers to purchase Securities and may reject any such offer, in whole or in part. Subject to the terms and conditions hereof, payment of the purchase price for, and delivery of, the Securities shall be made at the Closing of the Placement as provided in the Purchase Agreements. As compensation for services rendered, immediately upon the Closing of the Placement, the Company shall deliver to the Placement Agent in cash by wire transfer of immediately available funds a fee equal to eight percent (8%) of the aggregate gross proceeds raised in the Placement (the "**Cash Fee**").

Notwithstanding anything to the contrary contained herein, the provisions concerning the payment of fees, reimbursement of expenses, tail, indemnification and contribution, confidentiality, conflicts, independent contractor, and waiver of the right to trial by jury will survive any expiration or termination of this Agreement. Notwithstanding anything to the contrary contained herein, the Company has the right to terminate this Agreement for cause in compliance with FINRA Rule 5110(g)(5)(B)(i). The exercise of such right of termination for cause eliminates the Company's obligations with respect to the provisions relating to the tail fees and the right of first refusal. Notwithstanding anything to the contrary contained in this Agreement, in the event that the Placement pursuant to this Agreement shall not be carried out for any reason whatsoever during the Term, the Company shall be obligated to pay to the Placement Agent its actual and accountable out-of-pocket expenses related to the Placement (including the fees and disbursements of the Placement Agents; legal counsel) as set forth in Section 6 hereunder.

Nothing in this Agreement shall be construed to limit the ability of the Placement Agent or its Affiliates to pursue, investigate, analyze, invest in, or engage in investment banking, financial advisory, or any other business relationship with Persons (as defined below) other than the Company. As used herein (i) "Persons" means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof), or other entity of any kind and (ii) "Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person as such terms are used in and construed under Rule 405 under the Securities Act of 1933, as amended (the "**Securities Act**"). The Company shall furnish, or cause to be furnished, to the Placement Agent all information requested by the Placement Agent for the purpose of rendering services hereunder and conducting due diligence (all such information being the "**Information**"). In addition, the Company agrees to make available to the Placement Agent upon request from time to time the officers, directors, accountants, counsel and other advisors of the Company. The Company recognizes and confirms that the Placement Agent (a) will use and rely upon the Information, including any documents provided to investors in the Placement and upon information available from generally recognized public sources in performing the services contemplated by this Agreement without having independently verified the same; (b) does not assume responsibility for the accuracy or completeness of the offering documents or the Information and such other information; and (c) will not make an appraisal of any of the assets or liabilities of the Company. Upon reasonable request, the Company will meet with the Placement Agent or its representatives to discuss all information relevant for disclosure in the offering documents and will cooperate in any investigation undertaken by the Placement Agent thereof, including any document included or incorporated by reference therein. At the request of the Placement Agent, the Company shall deliver such legal letters, including, without limitation, opinions, comfort letters, officers' and secretary certificates, and good standing certificates, all in a form and substance reasonably satisfactory to the Placement Agent and its counsel as is customary for the Placement. The Placement Agent shall be a third-party beneficiary of any representations, warranties and covenants made by the Company in any offering document related to the Placement.

(c) The Closing of the Placement shall be conducted pursuant to the Purchase Agreement via wire transfer and such Securities shall be registered in such name or names and shall be in such denominations as set forth on the signature page of each respective Purchaser of the Purchase Agreement. The Placement Agent shall not have any independent obligation to verify the accuracy or completeness of any information contained in Purchase Agreement or other subscription documents for the Placement (the "**Subscription Documents**") or the authenticity, sufficiency, or validity of any check delivered by any prospective Purchaser in payment for the Securities, nor shall the Placement Agent incur any liability with respect to any such verification or failure to verify.

**Section 2. Representations, Warranties, and Covenants.**

(a) **Representations of the Company.** With respect to the Securities, each of the representations and warranties made by the Company to the Purchasers in the Purchase Agreement in connection with the Placement, is hereby incorporated herein by reference into this Agreement (as though fully restated herein) and is, as of the Closing Date, hereby made to, and in favor of, the Placement Agent. In addition to the foregoing, the Company represents and warrants that, to its knowledge, there are no affiliations with any Financial Industry Regulatory Authority ("**FINRA**") member firm among the Company's officers, directors or any holders of five percent (5.0%) or more of the outstanding shares of Common Stock.

The Company acknowledges that the Placement Agent will rely upon the accuracy and truthfulness of the foregoing representations and warranties and each of the representations and warranties made by the Company pursuant to the Transaction Agreements and hereby consents to such reliance.

(b) **Covenants of the Company.** The Company covenants and agrees to continue to retain (i) a firm of Public Company Accounting Oversight Board independent registered public accountants for a period of at least two (2) years after the Closing Date and (ii) a competent transfer agent with respect to the Shares for a period of two (2) years after the Closing Date.

(c) **Representations of the Placement Agent.** The Placement Agent represents and warrants that it (i) is a member in good standing of FINRA, (ii) is registered with the Commission as a broker/dealer under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), (iii) is licensed as a broker/dealer under the laws of the United States of America, applicable to the offers and sales of the Securities by the Placement Agent, (iv) is and will be a corporate body validly existing under the laws of its place of incorporation, and (v) has full power and authority to enter into and perform its obligations under this Agreement. The Placement Agent will immediately notify the Company in writing of any change in its status with respect to subsections (i) through (v) above. The Placement Agent covenants that it will use its reasonable best efforts to conduct the Placement hereunder in compliance with the provisions of this Agreement and the requirements of applicable law.

**Section 3. Delivery and Payment.** The Closing shall occur at the offices of Sullivan & Worcester LLP ("**Company Counsel**") (or at such other place as shall be agreed upon by the Parties, including via remote transmission of Closing documentation and the Transaction Documents). Subject to the terms and conditions hereof, at the Closing, payment of the purchase price for the Securities sold on the Closing Date shall be made by federal funds via wire transfer, and such Securities shall be registered in such name or names and shall be in such denominations, as the Placement Agent may request at least one business day before the time of purchase.

Deliveries of the documents with respect to the purchase of the Securities, if any, shall be made at the offices of Company Counsel. All actions taken at the Closing shall be deemed to have occurred simultaneously. The Company and the Placement Agent may agree to conduct one or more Closings of the Placement.

**Section 4. Conditions of the Obligations of the Placement Agent.** The obligations of the Placement Agent and the closing of the sale of the Securities are subject to the accuracy, when made and on the Closing Date, of the

representations and warranties on the part the Company contained herein and in the Purchase Agreement, to the performance by the Company of its obligations hereunder and under the Purchase Agreement, and to each of the following additional conditions, any of which may be waived in writing by the Placement Agent:

(a) Transaction Documents. The Transactions Documents between the Company and the Purchasers shall have been executed and delivered.

(b) Corporate Proceedings and Legal Opinion. All corporate proceedings and other legal matters incident to the authorization, execution, and delivery of this Agreement, the Purchase Agreement, and the transactions contemplated hereby shall be completed or resolved in a manner reasonably satisfactory to the Placement Agent. The Placement Agent shall have received a legal opinion from Company Counsel, addressed to the Placement Agent and dated as of the Closing Date, in form and substance reasonably acceptable to the Placement Agent.

(c) No Material Adverse Change. Subsequent to the execution and delivery of this Agreement and prior to the Closing Date, in the Placement Agent's sole judgment after consultation with the Company, there shall not have occurred any material adverse effect or development involving a prospective material adverse change in the condition or the business activities, financial or otherwise, of the Company.

(d) Registration of Common Stock; Listing. The Company shall have taken no action designed to terminate, or likely to have the effect of terminating, the registration of the Common Stock under the Exchange Act or delisting or suspending from trading the Common Stock from the U.S. national securities exchange on which it is listed, nor has the Company received any information suggesting that the U.S. Securities and Exchange Commission (the "Commission") or the Trading Market or other U.S. applicable national exchange is contemplating terminating such registration or listing.

(e) Officer's and Secretary's Certificates. The Placement Agent has received customary certificates of the Company's Chief Executive Officer (the "Officer's Certificate") as to the accuracy of the representations and warranties contained in the Purchase Agreement, and a certificate of the Company's Secretary (or other suitable executive officer) (the "Secretary's Certificate") certifying (i) that the Company's organizational documents are true and complete, have not been modified and are in full force and effect; (ii) that the resolutions of the Company's Board of Directors (or any authorized committee thereof) relating to the Placement are in full force and effect and have not been modified; and (iii) as to the incumbency of the officers of the Company. Each of the Officer's Certificate and Secretary's Certificate must be dated as of the Closing Date, and all documents referenced in the Secretary's Certificate must be attached thereto.

(f) Certificate of Good Standing. Within 5 business days after the Closing Date, the Company shall deliver to the Placement Agent a certificate of good standing of the Company issued by the Secretary of State of the State of Delaware.

(g) Purchase Agreement and Other Deliverables. The Company shall have delivered, or caused to be delivered, all deliverables set forth in the Purchase Agreement, in form and substance reasonably satisfactory to the Placement Agent and its counsel, and such agreements shall be in full force and effect.

(h) No Legal Impediment. No statute, regulation, rule, executive order, decree, ruling, or injunction shall have been enacted, entered, promulgated, or endorsed by any court or governmental authority of competent jurisdiction which prohibits or materially adversely affects any of the transactions contemplated by this Agreement.

(i) Placement Agent Compensation. The Cash Fee calculated in the manner provided in Section 1(a), payment of the non-accountable expense allowance and reimbursement of expenses as set forth in Section 6 shall be paid or delivered to the Placement Agent at Closing by wire transfer of immediately available funds to an account specified by the Placement Agent to the Company prior to the Closing.

If any condition specified in this Section 4 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Placement Agent by notice to the Company at any time on or prior to the Closing Date, which termination shall be without liability on the part of any party to any other party, except that Section 6 (Payment of Expenses), Section 7 (Indemnification and Contribution), Section 8 (Representations and Indemnities to Survive Delivery), Section 14 (Right of First Refusal) and Section 15 (Tail) shall at all times be effective and shall survive such termination.

**Section 5. Covenants and Agreements of the Company and Placement Agent.** The Company further covenants and agrees with the Placement Agent as follows:

(a) Blue Sky Compliance. The Company will cooperate with the Placement Agent and the Purchasers in endeavoring to qualify the Securities for sale under the securities laws of such jurisdictions (United States and foreign) as the Placement Agent and the Purchasers may reasonably request and will make such applications, file such documents, and furnish such information as may be reasonably required for that purpose, *provided* the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction where it is not now so qualified or required to file such a consent, and *provided further* that the Company shall not be required to produce any new disclosure documents. The Company will, from time to time, prepare and file such statements, reports, and other documents as are or may be required to continue such qualifications in effect for so long a period as the Placement Agent may reasonably request for distribution of the Securities. The Company will advise the Placement Agent promptly of the suspension of the qualification or registration of (or any such exemption relating to) the applicable Securities for the offering, sale, or trading in any jurisdiction or any initiation or threat of any proceeding for any such purpose, and in the event of the issuance of any order suspending such qualification, registration or exemption, the Company shall use its commercially reasonable efforts to obtain the withdrawal thereof at the earliest possible moment.

(b) [Reserved].

(c) Copies of any Amendments and Supplements to the SEC Reports. The Company will furnish the Placement Agent, without charge, during the period beginning on the date hereof and ending on the Closing Date, as many copies of the SEC Reports and other documents to be furnished to the Purchasers as the Placement Agent may reasonably request; *provided* that the Company's filing of the SEC Reports on the Electronic Data Gathering and Analysis Retrieval system of the SEC shall be deemed to satisfy this covenant.

(f) Additional Documents. The Company will enter into any customary Closing documentation as the Placement Agent or the Purchasers deem necessary or appropriate to consummate the Placement, all of which will be in form and substance reasonably acceptable to the Placement Agent and the Purchasers.

(g) No Manipulation of Price. The Company will not take, directly or indirectly, any action designed to cause or result in, or that has constituted or might reasonably be expected to constitute, the stabilization or manipulation of the price of any of its securities, including of its Common Stock.

(h) Acknowledgment. The Company acknowledges that any advice given by the Placement Agent to the Company is solely for the benefit and use of the Board of Directors and may not be used, reproduced, disseminated, quoted, or referred to, without the Placement Agent's prior written consent.

(i) Announcement of Placement. The Company acknowledges and agrees that the Placement Agent may, subsequent to the Closing and at the Placement Agent's expense, make public its involvement with the Placement.

(j) Reliance on Others. The Company confirms that it will rely on its own counsel and accountants for legal and accounting advice.

(k) Research Matters. By entering into this Agreement, the Placement Agent does not provide any promise, either explicitly or implicitly, of favorable or continued research coverage of the Company, and the Company hereby acknowledges and agrees that the Placement Agent's selection as a placement agent for the Placement was in no way conditioned, explicitly or implicitly, on the Placement Agent providing favorable or any research coverage of the Company. In accordance with FINRA Rule 2711(e), the parties hereto acknowledge and agree that the Placement Agent has not directly or indirectly offered favorable research, a specific rating or a specific price target, or threatened to change research, a rating or a price target, to the Company or inducement for the receipt of business or compensation. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Placement Agent with respect to any conflict of interest that may arise from the fact that the views expressed by their independent research analysts and research departments may be different from or inconsistent with the views or advice communicated to the Company by the Placement Agent's investment banking divisions. The Company acknowledges that the Placement Agent is a full service securities firm and as such from time to time, subject to applicable securities laws, may effect transactions for its own account or the account of its customers and hold long or short position in debt or equity securities of the Company.

**Section 6. Payment of Expenses.** Subject to the following, the Company shall reimburse the Placement Agent promptly upon request for all reasonable and accountable out-of-pocket expenses incurred in connection with the Placement, whether or not there is a closing of the Placement, including but not limited to travel expenses, due diligence expenses, the costs of background checks on the Company's officers and directors and any of its shareholders designated by the Placement Agent, the costs associated with the Placement Agent's use of book-building and compliance software, the fees and expenses of the Placement Agent's legal counsel and any other independent advisors selected and retained by the Placement Agent, and all fees, expenses and disbursements required under the blue sky securities laws of such states and other jurisdictions as the Placement Agent may reasonably designate (with the Company's consent, which shall not be unreasonably withheld), provided that the expenses reimbursable to the Placement Agent under this Section 6 shall not exceed \$175,000, which will be paid from the proceeds of this Offering at Closing. In addition, the Company shall pay Placement Agent a non-refundable cash fee equal to 1.0% of the gross proceeds of the Placement as a non-accountable expense allowance. Notwithstanding the foregoing, any advance received by the Placement Agent will be reimbursed to the Company to the extent not actually incurred in compliance with FINRA Rule 5110(g)(4)(A).

The Company will bear all fees, disbursements and expenses incurred by the Company in connection with any proposed Placement.

**Section 7. Indemnification and Contribution.**

(a) To the extent permitted by law, with respect to the Securities, the Company will indemnify and hold harmless the Placement Agent, its affiliates, and each person controlling the Placement Agent (within the meaning of Section 15 of the Securities Act), and the directors, officers, agents, shareholders, and employees of the Placement Agent, its affiliates and each such controlling person (the Placement Agent, and each such entity or person, an "Indemnified Person") from and against any losses, claims, damages, judgments, assessments, costs, and other liabilities, including reasonable attorneys' fees (collectively, the "Liabilities"), and shall reimburse each Indemnified Person for all fees and expenses (including the reasonable fees and expenses of one counsel for all Indemnified Persons, except as otherwise expressly provided herein) (collectively, the "Expenses") as they are incurred by an Indemnified Person in investigating, preparing, pursuing, or defending any actions taken or omitted to be taken by the Company, whether or not any Indemnified Person is a party thereto, caused by a breach by the Company of any of its representations, warranties, or covenants contained in this Agreement or in any certificate delivered by or on behalf of the Company in connection with this Agreement; *provided, however*, that, the

Company shall not be responsible for any Liabilities or Expenses of any Indemnified Person that are finally judicially determined to have resulted solely from such Indemnified Person's (x) gross negligence or willful misconduct in connection with any of the advice, actions, inactions, or services referred to above or (y) use of any offering materials or information concerning the Company in connection with the offer or sale of the Securities in the Placement which were not authorized for such use by the Company and which use constitutes gross negligence, fraud, violation of law, bad faith, or willful misconduct. The Company also agrees to reimburse each Indemnified Person for all Expenses as they are incurred in connection with enforcing such Indemnified Person's rights under this Agreement. **Notwithstanding the foregoing, and for the avoidance of doubt, it is mutually understood and agreed that the Company acknowledges and agrees that the Placement Agent may rely upon, and is an express third-party beneficiary of, the representations, warranties, and applicable covenants set forth in any agreements with the Purchasers in connection with the Placement.**

(b) Upon receipt by an Indemnified Person of actual notice of an action against such Indemnified Person with respect to which indemnity may be sought under this Agreement, such Indemnified Person shall promptly notify the Company in writing; *provided* that failure by any Indemnified Person so to notify the Company shall not relieve the Company from any liability which the Company may have on account of this indemnity or otherwise to such Indemnified Person, except to the extent the Company shall have been prejudiced by such failure. The Company shall, if requested by the Placement Agent, assume the defense of any such action including the employment of counsel reasonably satisfactory to the Placement Agent, which counsel may also be Company Counsel. Any Indemnified Person shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless: (i) the Company has failed promptly to assume the defense and employ counsel or (ii) the named parties to any such action (including any impeded parties) include such Indemnified Person and the Company, and such Indemnified Person shall have been advised in the reasonable opinion of counsel that there is an actual conflict of interest that prevents the counsel selected by the Company from representing both the Company (or another client of such counsel) and any Indemnified Person; *provided* that the Company shall not in such event be responsible hereunder for the fees and expenses of more than one firm of separate counsel for all Indemnified Persons in connection with any Action or related Actions, in addition to any local counsel. The Company shall not be liable for any settlement of any action effected without its written consent (which shall not be unreasonably withheld). In addition, the Company shall not, without the prior written consent of the Placement Agent (which shall not be unreasonably withheld), settle, compromise, or consent to the entry of any judgment in or otherwise seek to terminate any pending or threatened action in respect of which indemnification or contribution may be sought hereunder (whether or not such Indemnified Person is a party thereto) unless such settlement, compromise, consent, or termination includes an unconditional release of each Indemnified Person from all Liabilities arising out of such action for which indemnification or contribution may be sought hereunder. The indemnification required hereby shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as such expense, loss, damage, or liability is incurred and is due and payable.

(c) In the event that the foregoing indemnity is unavailable to an Indemnified Person other than in accordance with this Agreement, the Company shall contribute to the Liabilities and Expenses paid or payable by such Indemnified Person in such proportion as is appropriate to reflect (i) the relative benefits to the Company, on the one hand, and to the Placement Agent and any other Indemnified Person, on the other hand, of the matters contemplated by this Agreement or (ii) if the allocation provided by the immediately preceding clause is not permitted by applicable law, not only such relative benefits but also the relative fault of the Company, on the one hand, and the Placement Agent and any other Indemnified Person, on the other hand, in connection with the matters as to which such Liabilities or Expenses relate, as well as any other relevant equitable considerations; *provided* that in no event shall the Company contribute less than the amount necessary to ensure that all Indemnified Persons, in the aggregate, are not liable for any Liabilities and Expenses in excess of the amount of fees actually received by the Placement Agent pursuant to this Agreement. For purposes of this paragraph, the relative benefits to the Company, on the one hand, and to the Placement Agent on the other hand, of the matters contemplated by this Agreement shall be deemed to be in the same proportion as (i) the total value paid or contemplated to be paid to or received or contemplated to be received by the Company in the transaction or transactions that are within the scope of this Agreement, whether or not any such transaction is consummated, bears to (ii) the fees paid to the Placement Agent under this Agreement. Notwithstanding the above, no person guilty of fraudulent misrepresentation within the meaning of Section 11(f) of the Securities Act, shall be entitled to contribution from a party who was not guilty of fraudulent misrepresentation.

(d) The Company also agrees that no Indemnified Person shall have any liability (whether direct or indirect, in contract or tort or otherwise) to the Company for or in connection with advice or services rendered or to be rendered by any Indemnified Person pursuant to this Agreement, the transactions contemplated thereby or any Indemnified Person's actions or inactions in connection with any such advice, services, or transactions except for Liabilities (and related Expenses) of the Company that are finally judicially determined to have resulted solely from such Indemnified Person's gross negligence or willful misconduct in connection with any such advice, actions, inactions, or services.

(e) The reimbursement, indemnity, and contribution obligations of the Company set forth herein shall apply to any modification of this Agreement and shall remain in full force and effect regardless of any termination of, or the completion of any Indemnified Person's services under or in connection with, this Agreement.

(f) The Placement Agent and the Company agree that the obligations of each of the Parties are solely corporate obligations, and that no officer, director, employee, agent, or shareholder of either Party shall be subjected to any personal liability whatsoever to any person, nor will any claim for liability or suit be asserted by, or on behalf of, either the Placement Agent or the Company. In no event shall the Placement Agent be liable to the Company, nor will the Company be liable to the Placement Agent, whether a claim be in tort, contract or otherwise, for any amount in excess of the total amount paid by the Company to the Placement Agent under this Agreement.

**Section 8. Representations and Indemnities to Survive Delivery.** The respective indemnities, agreements, representations, warranties, and other statements of the Company or any person controlling the Company, of its officers, and of the Placement Agent set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by or on behalf of the Placement Agent, the Company, or any of its or their partners, officers, or directors or any controlling person, as the case may be, and will survive delivery of and payment for the Securities sold hereunder and any termination of this Agreement. A successor to the Placement Agent, or to the Company, its directors or officers or any person controlling the Company, shall be entitled to the benefits of the indemnity, contribution, and reimbursement agreements contained in this Agreement.

**Section 9. Notices.** All communications hereunder shall be in writing and shall be mailed, hand delivered, telecopied, or e-mailed and confirmed to the parties hereto as follows:

If to E.F. Hutton & Co.:

E.F. Hutton & Co.  
745 Fifth Avenue, 34th Floor & PH  
New York, NY 10151  
Attn: Joseph T. Rallo  
Email: jrallo@efhutton.com

*With a copy (which shall not constitute notice) to:*

McDermott Will & Schulte LLP  
One Vanderbilt Avenue  
New York, NY 10017  
Attn: Robert Cohen  
Email: rcohen@mcdermottllp.com

If to the Company:

Shuttle Pharmaceuticals Holdings, Inc.  
401 Professional Drive, Suite 260  
Cathetersburg, MD 20879  
Attn: Christopher Cooper  
Email: cooper@venturefirst1.com

*With a copy (which shall not constitute notice) to:*

Sullivan & Worcester LLP  
1251 Avenue of the Americas, 19<sup>th</sup> Floor  
New York, NY 10020

Attn: David E. Danovitch, Esq.  
Aaron M. Schleicher, Esq.  
Email: ddanovitch@sullivanlaw.com  
aschleicher@sullivanlaw.com

Any party hereto may change the address for receipt of communications by giving written notice to the others.

**Section 10. Prior Agreement.** By entering into this Agreement, the parties hereto agree that that any prior letter of engagement between the parties relating to the Placement, shall automatically terminate and cease to have any effect whatsoever and shall be superseded in its entirety by this Agreement.

**Section 11. Successors and Assignment.** This Agreement will inure to the benefit of and be binding upon the parties hereto, and to the benefit of the employees, officers, and directors and controlling persons referred to in Section 8 hereof, and to their respective successors, and personal representative, and no other person will have any right or obligation hereunder.

**Section 12. Partial Unenforceability.** The invalidity or unenforceability of any section, paragraph, or provision of this Agreement shall not affect the validity or enforceability of any other section, paragraph, or provision hereof. If any Section, paragraph, or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

**Section 13. Governing Law Provisions.** This Agreement and the transactions contemplated hereby shall be governed as to validity, interpretation, construction, effect, and in all other respects by the internal laws of the State of New York, without regard to the conflict of laws principles thereof. The Placement Agent and the Company agree that with respect to any controversy or claim relating to, arising under or involving this Agreement or breach thereof (a "Claim"), the matter shall first be submitted for mediation through the Judicial Arbitration and Mediation Service, Inc. ("JAMS") and its applicable rules in New York, New York, provided, however, that in the case of a breach or threatened breach of the non-circumvention covenant stated herein, the Placement Agent may seek and obtain, in addition to any remedies available under this Agreement or applicable law, an injunction or other equitable relief from any court of competent jurisdiction and nothing in this Agreement shall in any way limit or condition its right and recourse to seek and obtain such equitable relief. In the event that the Placement Agent and the Company are not able to agree on a mediator within thirty (30) days of the first party seeking mediation, the presiding Judge of the Superior Court of the county which the venue would lie for the filing of a complaint for relief in such Claim shall have jurisdiction to appoint a mediator. The parties covenant that they will participate in the mediation in good faith.

In the event that the Placement Agent and the Company are unable to resolve any claim after mediation as set forth in the preceding paragraph, then the parties hereby agree that such Claim shall be submitted to JAMS for final and binding arbitration pursuant to its Comprehensive Arbitration Rules and Procedures (the "Arbitration Rules") in New York, New York. The arbitration shall be conducted before a neutral arbitrator who shall be an attorney or retired Judge and shall be selected in accordance with the Arbitration Rules. The arbitrator's award shall be final and binding on all parties. Except to the extent otherwise required pursuant to the applicable JAMS rules and procedures and applicable law, each party will pay the fees of its respective attorney(s), expert(s), and other fees.

Without limiting the mediation and arbitration provisions set forth above, each party hereby irrevocably agrees and consents to be subject to the jurisdiction of the state court sitting in New York County, State of New York, or if the state court lacks jurisdiction, the United States District Court for the Southern District of New York, in any suit, action or proceeding pursuant to this Agreement. Each party hereby irrevocably consents to the service of any and all process in any such suit, action or proceeding by the delivery of such process in person, by overnight courier, facsimile or first class mail with a copy to email to such party as set forth in Section 9 hereof.

**Section 14. Right of First Refusal.** Following the Closing Date, the Placement Agent shall have an irrevocable right of first refusal (the "Right of First Refusal") until eighteen (18) months following the Closing Date, to act as sole investment banker, sole book-runner, sole placement agent and/or sole financial advisor, at the Placement Agent's sole discretion, for each and every future public and private equity and debt offering, including all equity-linked financings (each, a "Subject Transaction") of the Company, or any successor to or any current or future subsidiary of the Company, on terms and conditions customary to the Placement Agent for such Subject Transactions. The Placement Agent shall have the sole right to determine whether or not any other broker dealer shall have the right to participate in a Subject Transaction and the economic terms of such participation. For the avoidance of any doubt, the Company shall not retain, engage or solicit any additional investment banker, book-runner, financial advisor, underwriter and/or placement agent in a Subject Transaction without the express written consent of the Placement Agent, not to be unreasonably withheld, conditioned or delayed.

**Section 15. Tail.** If there is a Closing of the Placement, or if this Agreement terminates prior to Closing (other than a termination for cause in compliance with FINRA Rule 5110(g)(5)(B)(i)), the Placement Agent shall be entitled to compensation under Section 1 hereof, calculated in the manner set forth therein, with respect to any Subject Transaction if, prior to any time within the eighteen (18) month period following the expiration or termination of this Agreement, either (i) a Subject Transaction is consummated, or (ii) an agreement is executed by the Company pursuant to which a Subject Transaction is at any later date consummated, in each case, regardless of whether and to what extent the Placement Agent actually participated in procuring or negotiating the Subject Transaction. In addition, upon the closing of an at-the-market (ATM) offering, the Company shall pay Placement Agent a non-refundable cash fee equal to three point five percent (3.5%) of the aggregate maximum gross proceeds raised thereby. In addition, the Company shall pay the Placement Agent a non-refundable cash fee equal to one percent (1.0%) of the gross proceeds of any Subject Transaction as a non-accountable expense allowance. All fees payable pursuant to this Section 15 shall be payable at the closing of the Subject Transaction via flow of funds.

**Section 16. General Provisions.**

(a) This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings, and negotiations with respect to this Placement. This Agreement may be executed in two or more counterparts, each one of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Agreement may not be amended or modified unless in writing by all of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit. Section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement.

(b) The Company acknowledges that in connection with the offering and sale of the Securities: (i) the Placement Agent has acted at arm's length, are not agents of, and owe no fiduciary duties to the Company or any other person, (ii) the Placement Agent owes the Company only those duties and obligations set forth in this Agreement, and (iii) the Placement Agent may have interests that differ from those of the Company. The Company waives to the full extent permitted by applicable law any claims it may have against the Placement Agent arising from an alleged breach of fiduciary duty in connection with the offering or sale of the Securities.

(c) The Company shall be responsible for any and all compliance with the securities laws applicable to it, including without limitation, Regulation D and the Securities Act, and Rule 506 promulgated thereunder, and all state securities laws.

(d) Each Party agrees not to mention the name of the other Party or its agents in any press release or news announcement without the express written consent of the other party.

(e) This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. Delivery of an executed counterpart of this Agreement by facsimile, email (including .pdf) or other electronic transmission shall be equally as effective as delivery of a manually executed counterpart.

**Section 17. Confidentiality.** In the event of the consummation or public announcement of the Placement, the Placement Agent shall have the right to disclose its participation in such offering, including, without limitation, the Placement at its own cost of "tombstone" advertisements in financial and other newspapers and journals.

**Section 18. Limitations on Engagement.** The Company acknowledges that the Placement Agent has been retained only by the Company, that the Placement Agent is providing services hereunder as an independent contractor (and not in any fiduciary or agency capacity) and that the Company's engagement of the Placement Agent is not deemed to be on behalf of, and is not intended to confer rights upon, any shareholder, owner or partner of the Company or any other person not a party hereto as against the Placement Agent or any of its affiliates, or any of its or their respective officers, directors, controlling persons (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act), employees or agents. Unless otherwise expressly agreed in writing by the Placement Agent, no one other than the Company is authorized to rely upon this Agreement or any other statements or conduct of the Placement Agent, and no one other than the Company is intended to be a beneficiary of this Agreement. The Company acknowledges that any recommendation or advice, written or oral, given by the Placement Agent to the Company in connection with the Placement Agent's engagement is intended solely for the benefit and use of the Company's management and directors in considering a possible Offering and any such recommendation or advice is not on behalf of, and shall not confer any rights or remedies upon, any other persons or be used or relied upon for any other purpose.

*[The remainder of this page has been intentionally left blank.]*

[SIGNATURE PAGE TO THE PLACEMENT AGENCY AGREEMENT]

If the foregoing is in accordance with your understanding of our agreement, please sign below whereupon this instrument, along with all counterparts hereof, shall become a binding agreement in accordance with its terms.

Very truly yours,

**E.F. Hutton & Co.**

By: /s/ Duncan B. Swanston  
Name: Duncan B. Swanston  
Title: Supervisory Principal

The foregoing Placement Agency Agreement is hereby confirmed and accepted as of the date first above written.

**Shuttle Pharmaceuticals Holdings, Inc.**

By: /s/ Christopher Cooper  
Name: Christopher Cooper  
Title: Chief Executive Officer

**SECOND AMENDMENT TO  
ASSET PURCHASE AGREEMENT**

This Second Amendment to Asset Purchase Agreement (this "**Amendment**") is made and entered into as of May 4, 2026 (the "**Effective Date**"), by and among Shuttle Pharmaceuticals Holdings, Inc., a Delaware corporation ("**Parent**"), 1563868 B.C. Ltd., a Canadian limited corporation ("**Purchaser**"), 1542770 BC Ltd., a Canadian limited corporation ("**Seller**") and ZhiTian (Andy) Zhang, an individual residing in Vancouver, Canada ("**Seller Guarantor**") (Parent, Purchaser, Seller and Seller Guarantor are collectively referred to herein as the "**Parties**" and individually as a "**Party**").

**WHEREAS**, the Parties entered into that certain Asset Purchase Agreement, dated as of November 20, 2025, as amended by that First Amendment to the Asset Purchase Agreement, dated December 23, 2025 (such amendment the "**First Amendment**" and collectively, the "**Agreement**"; capitalized terms used and not otherwise defined herein shall have the meanings ascribed to them in the Agreement) contemplating Purchaser's purchase of all right, title and interest in and to the Transferred Assets and the Transferred Liabilities of the Business, upon the terms and subject to the conditions set forth in the Agreement; and

**WHEREAS**, pursuant to the First Amendment, Parent issued 320,496 shares of Parent Common Stock to Seller as an Accelerated Issuance in lieu of payment of a portion of the First Installment Payment; and

**WHEREAS**, the Seller and Parent wish to cancel the Accelerated Issuance by Seller transferring back to Parent, and Parent accepting from Seller, the Parent Common Stock issued in connection therewith, with Parent to cancel such shares of Parent Common Stock upon receipt (the "**Accelerated Issuance Cancellation**"); and

**WHEREAS**, further to the Accelerated Issuance Cancellation, the Parties desire to amend the definition of "First Installment Payment" as set forth in the Agreement to increase and accelerate the cash payment owed to Seller on May 20, 2026; and

**WHEREAS**, the Purchase Price contemplates the payment of the First Installment Payment on May 20, 2026 and Second Installment Payment on November 20, 2026; and

**WHEREAS**, the Parties desire to amend the Agreement to provide for the accelerated payment of the First Installment Payment and the Second Installment Payment through the issuance, as of the Effective Date, in cash and in newly issued shares of Series B-1 Convertible Preferred Stock of the Parent; and

**WHEREAS**, the Parties further desire to amend the Agreement to modify the terms and conditions of the Agreement relating to the remaining unpaid Contingent Payments; and

**WHEREAS**, the Parties wish to modify the Agreement solely to the extent set forth herein, and otherwise to reaffirm all other terms, conditions, rights and obligations under the Agreement.

**NOW, THEREFORE**, in consideration of the mutual promises contained in this Amendment and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

**1. Amendment to Agreement.**

a. The following definitions shall be inserted in alphabetical order in Section 1.1:

""**Additional Milestone Event**"" has the meaning set forth in Section 3.4(G)."

""**Additional Milestone Event Notice**"" has the meaning set forth in Section 3.4(G)."

""**Milestone Issuance**"" has the meaning set forth in Section 3.4(G)."

""**Milestone Shares**"" has the meaning set forth in Section 3.4(G)."

""**Minimum Uptime**"" has the meaning set forth in Section 3.4(G)."

""**Mining Rigs**"" has the meaning set forth in Section 3.4(G)."

""**Second Accelerated Issuance**"" shall mean 270 shares of Series B-1 Convertible Preferred Stock, par value \$0.00001 of the Parent and \$3,646,642.00, payable in cash."

""**Second Accelerated Issuance Date**"" shall mean May 4, 2026."

b. The definitions of "Contingent Payments", "Installment Payment", and "Second Installment Payment" in Section 1.1 of the Agreement are hereby deleted in their entirety and replaced, respectively, with the following definitions:

""**Contingent Payments**"" shall mean the Tier 1 Consideration, the Tier 2 Consideration and the Pre-Funded Warrants."

""**First Installment Payment**"" shall mean \$0."

""**Installment Payments**"" shall mean the Accelerated Issuance, Second Accelerated Issuance, the First Installment Payment and the Second Installment Payment."

""**Second Installment Payment**"" shall mean \$0."

c. Section 3.1 (Purchase Price) of the Agreement is hereby deleted in its entirety and replaced with the following:

""**3.1 Purchase Price.**""

A. On the terms and subject to the conditions set forth herein, the consideration payable in respect of the sale, assignment and delivery of the Transferred Assets (the "**Purchase Price**") shall be (i) an amount in cash equal to the Closing Cash Consideration, payable on the Closing Date; (ii) the Accelerated Issuance, payable on the Accelerated Issuance Date; (iii) the Second Accelerated Issuance, payable on the Second Accelerated Issuance Date; (iv) the First Installment Payment, payable on the 6 month anniversary of the Closing Date; (v) the Second Installment Payment, payable on the one year anniversary of the Closing Date; (vi) the contingent right to receive the Contingent Payments in accordance with Section 3.4; and (vii) the assumption of the Transferred Liabilities, which clauses (i) through (vii) above, collectively, shall comprise the total consideration to be paid for the Transferred Assets. The Parties acknowledge that Purchaser will not be assuming any Excluded Liabilities and that Seller will remain responsible for all Excluded Liabilities.

B. On the Closing Date, Purchaser or its designee shall deliver an amount in cash to Seller equal to the Closing Cash Consideration. On the Accelerated Issuance Date, Parent shall deliver the Accelerated Issuance to Seller. On the Second Accelerated Issuance Date, Parent shall deliver the Second Accelerated Issuance to Seller. On the 6 month anniversary of the Closing Date, Purchaser or its designee shall deliver an amount of cash to Seller equal to the First Installment Payment. On the one year anniversary of the Closing Date, Purchaser or its designee shall deliver to Seller an amount of cash and/or Parent Common Stock to Seller equal to the Second Installment Payment."

d. Section 3.4 of the Agreement is hereby amended to add the following Subsection G:

""**G Additional Milestone Events.** Upon the achievement by Parent of each of the events set forth below (each, an "**Additional Milestone Event**"), Parent or its designee shall pay to the Seller or, in the event the Seller has dissolved, Seller Guarantor or designated Affiliate, up to three equal installments of pre-funded warrants (the "**Pre-Funded Warrants**") exercisable for 1,281,438 shares of Common Stock, in the aggregate (for a total of up to 3,844,313 shares of Common Stock, in the aggregate if all three Additional Milestone Events are achieved). Each such issuance of Pre-Funded Warrants in respect of a Milestone Event is referred to herein as a "**Milestone Issuance**". The shares of Common Stock issuable upon the exercise of any Pre-Funded Warrants issued in connection with an Additional Milestone Event, if any, are referred to herein as the "**Milestone Shares**".

The Pre-Funded Warrants and any Milestone Shares issued in connection with any exercise thereof shall be issued in accordance with Section 3.4(b).

Each of the following clauses (i), (ii) and (iii) is an "Additional Milestone Event" for purposes of this Section 3.4. For the avoidance of doubt, each Additional Milestone Event may only be achieved once, and shall entitle Seller to only one Milestone Issuance in respect thereof, regardless of how many times the conditions described therein may be satisfied:

- (i) the date upon which Parent or a subsidiary thereof purchased or purchases an aggregate of 2,500 dogecoin mining rigs ("**Mining Rigs**");

(ii) the date upon which Parent or a subsidiary thereof achieves a minimum 90% fleet operational uptime (the "Minimum Uptime") and maintains the Minimum Uptime for any seven (7) consecutive day period, excluding scheduled maintenance windows for servicing and force majeure events, and provided that such date is on or prior to the sixty (60) calendar day-anniversary of the commencement of operational uptime of the Mining Rigs; and

(iii) the date upon which the Company or a subsidiary thereof executes a binding colocation and hosting agreement securing electrical power and related infrastructure services at a rate not exceeding \$0.075 per kilowatt-hour, inclusive of all material operating costs.

Upon the achievement of an Additional Milestone Event, Parent shall, within three (3) Business Days thereafter, provide written notice to Seller (the "Additional Milestone Event Notice") specifying (i) the Milestone Event that has occurred, (ii) the date of occurrence of such Additional Milestone Event and (iii) such Pre-Funded Warrants issuable in respect of such Additional Milestone Event. Within three (3) Business Days following delivery of the applicable Additional Milestone Event Notice, subject to the terms and conditions set forth herein, Parent shall issue and deliver to Seller (or its designee) the Pre-Funded Warrants issuable in respect of such Additional Milestone Event.

Notwithstanding anything to the contrary herein, in no event shall Pre-Funded Warrants be issued pursuant to this Section 3.4 unless and until the Company obtains approval from its stockholders for the issuance of Common Stock upon the conversion of each of the Series B-1 Convertible Preferred Stock and Series B-2 Convertible Preferred Stock, par value \$0.00001, in accordance with the listing rules of the Trading Market."

2. Accelerated Issuance Cancellation. Simultaneous with the execution of this Amendment and as consideration for entry into this Amendment, the Seller has returned, and the Parent has received and cancelled, the Parent Common Stock issued pursuant to the Accelerated Issuance.

3. Effect of Amendment. From and after the Effective Date, each reference in the Agreement to "this Agreement," "hereunder," "hereof," "herein," or words of like import, and each reference in any other Transaction Document to the Agreement, shall be deemed to refer to the Agreement as amended by this Amendment.

4. Ratification. Each Party hereby reaffirms all of its respective covenants, agreements, obligations, representations and warranties under the Agreement, as amended hereby, and acknowledges and agrees that, after giving effect to this Amendment, the Agreement remains in full force and effect and is the legal, valid and binding obligation of such Party, enforceable in accordance with its terms.

5. No Other Modification. Except as specifically amended by the terms of this Amendment, this Amendment shall not constitute a waiver, amendment or modification of any provision of the Agreement and all other terms and conditions set forth in the Agreement shall remain in full force and effect.

6. Miscellaneous. The provisions of Sections 11.1 through 11.10 and 11.13 through 11.18 of the Agreement are hereby incorporated by reference into this Amendment, *mutatis mutandis*, as if fully set forth herein, and shall govern this Amendment.

7. Entire Agreement. This Amendment, together with the Agreement and the Transaction Documents, contains the entire agreement and understanding of the parties hereto with respect to the subject matter contained therein and may not be contradicted by evidence of any alleged oral agreement.

8. Further Assurances. Each party to this Amendment agrees to perform any further acts and execute and deliver any documents that may be reasonably necessary to carry out the provisions of this Amendment.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment to be effective for all purposes as of the date first above written.

**SHUTTLE PHARMACEUTICALS HOLDINGS, INC.**

By: /s/ Christopher Cooper  
Name: Christopher Cooper  
Title: CEO

**1563868 B.C. LTD.**

By: /s/ Christopher Cooper  
Name: Christopher Cooper  
Title: President

**1542770 BC LTD.**

By: /s/ ZhiTian Zhang  
Name: ZhiTian (Andy) Zhang  
Title: Authorized Signatory

Name: ZhiTian (Andy) Zhang

[Signature Page to Second Amendment to Asset Purchase Agreement]

## Shuttle Merges with United Dogecoin to Become the World's Largest Public Dogecoin Miner

*The combination and related financing is expected to result in the largest publicly listed Dogecoin mining company based on percentage of the global hashrate*

**Gaithersburg, Maryland, April 30, 2026** – Shuttle Pharmaceutical Holdings, Inc. (NASDAQ: SHPH) (“Shuttle”) has entered into a definitive merger agreement to acquire United Dogecoin Inc. (“United Dogecoin” or the “Company”), a Dogecoin mining company driven by industry experts. United Dogecoin will be merged into a wholly owned subsidiary of Shuttle. The merger is supported by a \$11 million concurrent Private Investment in Public Equity (“PIPE”) financing expected to close on May 4, 2026.

United Dogecoin’s competitive advantages begin with its size. Upon closing of the PIPE, United Dogecoin intends to secure a purchase order of up to 3,000 newest generation ElphaPex Mining Rigs. Within 60 days, the mining rigs are expected to be online, delivering a hash rate of up to 43,200 GH/s, approximately 1.5% of the world’s Dogecoin mining capacity at this time.

Furthermore, United Dogecoin’s existing relationship with ElphaPex, a leader in Dogecoin mining hardware, is expected to give the Company preferential access to ElphaPex’s high-efficiency mining rigs at strategic pricing, which should reduce the time needed to scale operations as market opportunities arise.

Through its existing relationships, United Dogecoin expects to generate DOGE at discount to purchasing on the open market even at current DOGE price range. It is expected to have access to providers of low-cost, behind-the-meter, renewable energy. United Dogecoin believes that its expected low-cost structure is the foundation of scalable, long-term growth.

The United Dogecoin team has a track record of success operating and scaling public cryptocurrency mining companies. Its CEO, Ryan Trasolini, has over a decade of experience in building high growth ventures. He was one of the founding shareholders of US Bitcoin Corp which did a merger of equals with Hut 8 (NASDAQ: HUT), forming a \$8B infrastructure platform. Trasolini subsequently co-founded American Data Centers, which partnered with Hut 8 to create American Bitcoin (NASDAQ: ABTC).

“Through our size, relationships, expertise and timing, we believe that we are uniquely positioned to be a global leader in Dogecoin mining,” said Ryan Trasolini, CEO of United Dogecoin and to be the co-CEO of the combined company. “The completion of this transaction will give investors exposure to Dogecoin via our dual-pronged strategy of mining Dogecoin with highly efficient, cost-effective rigs and holding mined Dogecoin on our balance sheet to build long-term asset value. This strategy has been successful in Bitcoin mining, and we are ready to apply it to Dogecoin mining with a view to deliver long-term shareholder value.”

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“United Dogecoin’s strategy mirrors that of Hut 8’s back in 2017,” said Andrew Kiguel, CEO of Realbotix, co-founder of Hut 8 and United Dogecoin board member. “We believe that while the opportunity for incredible upside in new Bitcoin miners has passed, Dogecoin mining is in its infancy, and United Dogecoin is well positioned to be a leader in the space.”

### Company Leadership

The Company’s Board of Directors expects to appoint Mr. Trasolini as Co-Chief Executive Officer with Christopher Cooper. Yuying Liang will continue in her role as Chief Financial Officer, providing continuity in financial leadership. It is expected that Mr. Trasolini will enter into a customary employment agreement with Shuttle.

### Merger Highlights

Under the terms of the merger agreement, signed April 30, 2026, Shuttle will issue an aggregate of 8,000 of a newly designated Series B-1 Convertible Preferred Stock to United Dogecoin’s equity holders in exchange for 100% of the outstanding shares of United Dogecoin. Upon subsequent receipt of Shuttle stockholder approval, the shares of Series B-1 Convertible Preferred Stock will be automatically convertible, at a conversion price of \$1.24 (subject to adjustment), into an aggregate of approximately 32,258,064 shares of Shuttle’s common stock, par value \$0.00001 per share (the “Company Common Stock”), subject to customary beneficial ownership limitations. Following the consummation of the merger, United Dogecoin will merge with and into, and become, a wholly-owned subsidiary of Shuttle, and will operate alongside Shuttle’s existing business.

In addition, United Dogecoin equityholders will receive up to 118,038,551 pre-funded warrants (“Pre-Funded Warrants”) exercisable for a like number of shares of Company Common Stock upon the new wholly-owned subsidiary meeting certain operational milestones post-closing (the “Milestones”). Such Pre-Funded Warrants will be issued only in the event Shuttle obtains stockholder approval.

### PIPE Highlights

In connection with the Merger, Shuttle entered into a securities purchase agreement with certain accredited investors in a concurrent private placement offering of 2,200 shares of newly designated Series B-2 Convertible Preferred Stock and common warrants (“Common Warrants”) to purchase 100% of the number of shares of Company Common Stock underlying the Series B-2 Convertible Preferred Stock (10,679,612 shares) (the “Offering”). Upon subsequent receipt of Shuttle stockholder approval, the shares of Series B-2 Convertible Preferred Stock will be automatically convertible, at a conversion price of \$1.03 (subject to adjustment), into an aggregate of approximately 9,708,738 shares of Company Common Stock, subject to customary beneficial ownership limitations. The Common Warrants have an exercise price of \$1.03 and a 3-year term. The Series B-2 Convertible Preferred Stock and the Common Warrants issued in the Offering will not be exercisable or convertible until stockholder approval is obtained.

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In addition, investors in the PIPE will receive up to 34,932,064 pre-funded warrants to purchase a like number of shares of Company Common Stock upon the post-merger company meeting the Milestones, which securities will be issued only in the event Shuttle obtains stockholder approval.

### Advisors

E.F. Hutton & Co. (“E.F. Hutton”) is proud to have served as the exclusive M&A advisor to Shuttle in connection with the merger, and as the exclusive placement agent for the concurrent PIPE financing.

Sullivan & Worcester LLP acted as legal advisor to Shuttle. Ruskin Moscou Faltischek PC acted as legal advisor to United Dogecoin. McDermott Will & Schulte acted as legal advisor to E.F. Hutton.

### About United Dogecoin

United Dogecoin is a Dogecoin mining company with competitive advantages in its size, access to equipment, and industry leading team. Its mission is to be the leader in the Dogecoin sector through high-efficiency, low-cost mining operations and strategic coin accumulation, building a robust reserve that strengthens its long-term position and sets it apart through innovation, consistency and expert execution.

### About Shuttle Pharmaceuticals

Shuttle (NASDAQ: SHPH) owns a pharmaceutical software AI driven platform for molecular discovery and early-stage drug development. By combining modern AI techniques with structured scientific workflows, the Molecule.ai platform helps researchers explore the chemical space more efficiently, evaluate molecular ideas with greater clarity and make more informed decisions during the earliest stages of drug development.

### Additional Information and Where To Find It

In connection with the merger, the PIPE and related transactions, Shuttle intends to file with the U.S. Securities and Exchange Commission (the “SEC”) a Proxy Statement pursuant to Section 14(a) of the Securities Exchange Act of 1934 (the “Proxy Statement”), in preliminary and definitive form, and other required documents regarding the issuance of the securities underlying the Series B-1 Preferred Stock and the Series B-2 Preferred Stock, with the SEC. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ THE PROXY STATEMENT, AS MAY BE AMENDED OR SUPPLEMENTED FROM TIME TO TIME, AND OTHER RELEVANT DOCUMENTS FILED BY SHUTTLE WITH THE SEC BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT SHUTTLE, UNITED DOGECOIN, THE MERGER, THE PIPE, THE SECURITIES AND THE RELATED RISKS AND RELATED MATTERS.

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The Definitive Proxy Statement will be mailed to stockholders of Shuttle. Investors will be able to obtain free copies of the Proxy Statement, as may be amended from time to time, and other relevant documents filed by Shuttle with the SEC (when they become available) through the website maintained by the SEC at [www.sec.gov](http://www.sec.gov). Copies of documents filed with the SEC by Shuttle, including the Proxy Statement (when available), will be available free of charge from Shuttle’s website at [www.shuttlepharma.com](http://www.shuttlepharma.com) under the “Investors” tab.

### Media and IR contact

[info@uniteddogecoin.com](mailto:info@uniteddogecoin.com)

### Cautionary Note Regarding Forward-Looking Statements

Statements in this press release about future expectations, plans and prospects, as well as any other statements regarding matters that are not historical facts, may constitute “forward-looking statements.” These statements include, but are not limited to, statements concerning the completion of the offering. The words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These forward-looking statements include, but are not limited to, statements regarding the merger (including any related post-closing actions), the post-merger company and its operations, strategies and plans, integration of businesses, governance changes, capital expenditures, cash flows and anticipated uses, synergies, opportunities and anticipated future performance, including the management team and board of directors of the post-merger company, expected use of proceeds from the PIPE offering and other financing activities, any future acquisitions and the maintenance of reserves and related arrangements. Information adjusted for the impact of the merger should not be considered a forecast of future results.

There are a number of risks and uncertainties that could cause actual results to differ materially from the forward-looking statements included in this report. These include, among others, the risk that the proposed transactions described herein may not be completed in a timely manner or at all; the risk that Shuttle's and United Dogecoin's businesses will not be integrated successfully, synergies and growth from the merger may not be fully realized or may take longer to realize than expected; potential adverse reactions or changes to business or employee relationships, including those resulting from the announcement or completion of the merger; failure to obtain or maintain required listing approvals or satisfy Nasdaq continued listing standards; inability to consummate planned financings on acceptable terms or within expected timeframes; risks relating to the volatile nature of the price of DOGE and other cryptocurrencies; risks relating to significant legal, commercial, regulatory and technical uncertainty regarding digital assets generally; risks relating to the treatment of digital assets for U.S. and foreign tax purposes; risks related to the unknown returns that the post-merger company's DOGE treasury strategy will generate; risks related to unproven strategies; the risk that changes in Shuttle's capital structure and governance following the merger could have adverse effects on the market value of its securities; the ability of Shuttle and the post-merger company to retain customers and retain and hire key personnel and maintain relationships with their suppliers and customers and on Shuttle's and the post-merger company's operating results and business generally; the risk the merger could distract management from ongoing business operations or cause Shuttle or the post-merger company to incur substantial costs; the risk that Shuttle may be unable to reduce expenses or access financing or liquidity; the impact of any related economic downturn; the risk of changes in governmental regulations or enforcement practices; and other important factors that could cause actual results to differ materially from those projected. All such factors are difficult to predict and are beyond Shuttle's and United Dogecoin's control, including those detailed in Shuttle's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and such other documents of Shuttle filed, or to be filed, with the SEC that are or will be available on Shuttle's website at [www.shuttlepharma.com](http://www.shuttlepharma.com) and on the website of the SEC at [www.sec.gov](http://www.sec.gov). All forward-looking statements are based on assumptions that Shuttle and United Dogecoin believe to be reasonable but that may not prove to be accurate. Any forward-looking statement speaks only as of the date on which such statement is made, and neither Shuttle nor United Dogecoin undertakes any obligation to correct or update any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by applicable law. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this press release.

#### **Participants in the Solicitation**

United Dogecoin, Shuttle, and their respective directors, executive officers, management and employees, under SEC rules, may be deemed to be participants in a solicitation of proxies of Shuttle's stockholders. Investors and stockholders may obtain more detailed information regarding the names, affiliations, and interests of Shuttle's directors and executive officers in its filings with the SEC. Information regarding the persons who may, under SEC rules, be deemed participants in the solicitation of proxies of Shuttle stockholders will be set forth in the Proxy Statement. Such interests may in some cases be different from those of United Dogecoin's or Shuttle's equity holders generally.

#### **No Offer or Solicitation**

This communication does not constitute an offer to sell or the solicitation of an offer to buy any securities, or a solicitation of any vote or approval, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. This communication is not, and under no circumstances is to be construed as, a prospectus, an advertisement or a public offering of the securities described in this press release in the United States or any other jurisdiction. No offer of securities shall be made except by means of a prospectus filed with the SEC meeting the requirements of Section 10 of the Securities Act of 1933, as amended, or an applicable exemption.

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## DISCLAIMER



This presentation (the "Presentation") contains forward-looking statements in respect of future events or the future financial performance of United Dogecoin, Inc. (the "Company" or "UNITED DOGECOIN"). Please carefully review the following notice and disclaimer.

**NOTICE TO RECIPIENT:** This investment is suitable only for sophisticated investors for whom an investment does not constitute a complete investment program, who do not require immediate liquidity for their investment and who fully understand and are willing to assume the risks involved. An investment may be considered to involve a substantial degree of risk, and an investor could lose all or a substantial amount of his or her investment. This document is not an offer to sell (or solicitation of an offer to buy) any interest in the Company. These materials may not be used or relied upon for any purpose other than as specifically contemplated by a written agreement. The materials may not be circulated outside of the recipient's organization, publicly referred to, or disclosed, in whole or in part, without express written permission.

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Forward-looking statements contained in this presentation are expressly qualified by this cautionary statement and reflect the Company's expectations as of the date hereof and are subject to change thereafter. The Company undertakes no obligation to update or revise any

forward-looking statements, whether as a result of new information, estimates or opinions, future events or results or otherwise or to explain any material difference between subsequent actual events and such forward-looking information, except as required by applicable law. Often, but not always, forward-looking statements can be identified by the use of words or phrases, including but not limited to, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. This presentation contains forward-looking statements subject to change, including but not limited to revenue projections based on a DOGE price of \$0.09 USD, including but not limited to monthly mining revenue, monthly gross profit, monthly profit per miner, and annual gross profit.

Accordingly, readers should not place undue reliance on forward-looking statements. The forward-looking statements contained in this presentation are expressly qualified by this cautionary statement and reflect the Company's expectations as of the date hereof and are subject to change thereafter. The Company undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, estimates or opinions, future events or results or otherwise or to explain any material difference between subsequent actual events and such forward-looking information, except as required by applicable law.

This communication does not constitute investment, legal, accounting, or tax advice. Nothing herein should be construed as a recommendation to invest in any strategy or project described. Prospective investors should consult their own legal, financial, and tax advisors to determine the appropriateness of any investment and to understand the risks associated with such investment.

The contemplated project involves the potential combination of the Company with a publicly traded company. This initiative is speculative in nature, may not result in any transaction, and involves a high degree of risk. No assurance can be given that the acquisition will be completed, that the proposed business strategy of the combined company will be implemented, or that the combined

company will be profitable. Digital assets are highly speculative and involve substantial risks. These risks include price volatility, rapidly changing technology, security vulnerabilities such as theft or loss of cryptographic keys, and counterparty risk from exchanges and custodians. Markets for digital assets are volatile and subject to manipulation, illiquidity, and sudden price swings. There is no assurance that any digital asset will maintain value, achieve adoption, or remain transferable. The past performance of the cryptocurrency markets and currently existing cryptocurrency treasury companies is not indicative of future results, including the performance of any investment described in these materials.

The regulatory environment of the cryptocurrency market and of companies that invest in cryptocurrencies is unclear at this time. Numerous laws are potentially applicable to the cryptocurrency markets, to companies that invest in cryptocurrencies, and to companies that provide investment advice to companies that invest in cryptocurrencies, including but not limited to the Investment Company Act of 1940, the Investment Advisers Act of 1940 and the Commodity Exchange Act. Any such laws and related regulations and interpretations may be amended or modified at any time, including by court decision, and the application of such laws and related rules and regulations may potentially have adverse consequences to the performance of any investment described in these materials.

Digital assets are held with third-party custodians. The Company is not responsible for their independent acts, omissions, solvency, or security. Risks associated with custodians include insolvency, breach or other acts that result in the loss of assets, will not be the responsibility of the Company. The Company makes no assurance regarding the adequacy of a custodian's safeguards or insurance.

Investments in early-stage ventures, control transactions, and digital assets involve substantial risk, including the complete loss of capital. You should not invest unless you can bear the risk of total loss. By reviewing this material, you acknowledge that you have read and understood this disclaimer and agree not to rely solely on the information presented herein in making any investment decision.

# PIPE OFFERING SUMMARY

<b>Acquirer</b>	Shuttle Pharmaceutical Holdings, Inc. (Nasdaq: SHPH)
<b>Transaction</b>	Acquisition of United Dogecoin, Inc. with a concurrent PIPE
<b>PIPE Size</b>	\$20,000,000 aggregate gross proceeds
<b>Anticipated Closing</b>	Week of April 27th, 2026
<b>Pre-Money Valuation (United Dogecoin)</b>	\$40,000,000
<b>Share Price</b>	~\$1.24 <sup>(1)</sup>
<b>PIPE Price</b>	20% discount
<b>Warrants</b>	100% coverage at a 100% strike price

<sup>(1)</sup> Based on the price per share on the day of closing

DOGECOIN MINING



TREASURY HOLDING

Our mission is to be the **leader in the Dogecoin sector** through high-efficiency mining operations and strategic coin accumulation, building a **robust reserve** that strengthens our **long-term position** and sets us apart through innovation, consistency, and expert execution.

## OPPORTUNITY

United Dogecoin is seeking to enter the public market at industry-leading scale with 7000 miners at an estimated 80% cost advantage to industry peers.

At United Dogecoin, we generate DOGE at a cash cost of only \$0.07, meaning we can produce each coin for far less than it costs investors to purchase it on the open market even during historic bear market conditions. Our low-cost structure is the foundation for scalable, long-term growth and consistent returns.

United Dogecoin has secured up to **27MW** of data center space powered by renewable energy.

Up to **\$20M** raise allocated to exercise our right to a secured purchase order of up to 7,000 newest generation ElphaPex Mining Rigs, DOGE Treasury, working capital and to the legacy business.

Total Hashrate

**100,800 GH/s**

Initial DOGE Mining Market Share

**4%+**

Total Power Draw

**27MW**

United Dogecoin will dynamically optimize its hardware mix, selecting the most profitable combination of ElphaPex DG1+ and DG2 miners at the time of purchase to maximize operational efficiency and ROI.

# WHY NOW? INDUSTRY ADVANTAGE



## Industry Leading Scale: at a Discount

United Dogecoin currently has a window to **enter the market at leading scale** with hardware allocation up to of 7,000 AlphaPex new generation rigs secured at a **80% discount to competitors**, and preferential payment terms.

## Cost Advantage: Producing DOGE Below Market Price

United Dogecoin is seeking to achieve industry-leading efficiency, **producing Dogecoin at a cash cost of \$0.07 per DOGE**, driven by \$0.055/kWh renewable power, meaning **we can produce each coin for less than it costs to purchase it on the open market.**

## High Trading Volume

Dogecoin has one of the **most active retail investor communities in crypto**. DOGE consistently ranks among the **top 10** cryptocurrencies by daily trading volume, even when its price is relatively low.

## Valuation Arbitrage Opportunity

Public Bitcoin miners with similar operational fundamentals currently trade at multi-billion-dollar valuations, despite increasingly compressed margins and intense competition.

**Now is a rare window to enter Dogecoin mining at scale.** DOGE is one of the most widely distributed tokens after Bitcoins. Dogecoin's ownership is broadly distributed, with most held by retail users, minimizing risk of manipulation and strengthening long-term credibility. Compared to Bitcoin, DOGE offers lower network difficulty, faster block times, and shorter ROI, making it far more accessible and profitable for new miners.

Despite being the **second most-mined Proof-of-Work asset and strong market liquidity**, Dogecoin has zero dedicated public mining exposure. This disconnect presents a unique public market arbitrage opportunity. A DOGE-first mining company doesn't just capture strong economics, it owns the brand narrative in one of crypto's most iconic, community-driven ecosystems, **with the potential to trade at a premium simply by leading in an untapped category.**

# MARKET OPPORTUNITY



### Global Digital Payments

**\$10T+**

Dogecoin is fast, low-cost peer-to-peer currency

### Creator & Influencer Economy

**\$250B+**

Micro-tipping and fan engagement

### Loyalty & Rewards

**\$90B+**

Brand adoption via Doge-based incentives

### Micropayments & Gaming

**\$60B+**

In-game and cross-platform payments

Dogecoin's low-friction design and brand ubiquity position it as a **utility layer for the everyday internet economy.**

Dogecoin's evolution from meme to mainstream currency follows a clear roadmap:

**1**

**Integration**

Expand Doge payment rails across major commerce, gaming, and creator platforms.

**2**

**Utility**

Enable Dogecoin as a reward, tip, and payment token through APIs and plug-ins.

**3**

**Liquidity**

Partner with fintechs and neobanks to enable seamless fiat-on/off ramps.

**4**

**Adoption**

Leverage cultural influencers and existing communities for organic user growth.

# MARKET INSIGHTS: Cryptocurrency

The crypto market in 2025 matured, with stronger fundamentals, deeper institutional involvement, and real-world use cases gaining traction. There is a strong crypto-friendly political climate emerging. Trump’s backing for establishing a U.S. Bitcoin reserve and boosting domestic mining dominance suggests strong institutional tailwinds ahead.

 <b>INSTITUTIONAL ADOPTION IS ACCELERATING</b>	 <b>US REGULATORY LANDSCAPE IS SHIFTING</b>	 <b>REAL-WORLD ASSET TOKENIZATION IS SCALING UP</b>	 <b>CORPORATE BITCOIN ACCUMULATION IS BOOMING</b>
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## Momentum Is Building

Bitcoin’s halving cycle, ETF expansion, and increasingly favorable policies set the stage for a bullish 2026. The Company expects deeper BTC integration into macro systems, rising altcoin traction, and acceleration in real-world asset tokenization.

While regulatory challenges remain, new ATHs are likely, and crypto’s disruption of traditional finance may only be just the beginning.

## Mainstream Accessibility & Institutional Legitimacy

Following the success of Bitcoin and Ethereum ETFs, 2026 could be a breakout year for broader crypto ETF adoption, and the Company believes that Dogecoin is one of the standout contenders.

The SEC is reviewing over 70 crypto ETF applications with **Solana and Dogecoin** having emerged as clear winners in the alt-coin space with dominating ETF filings and merchant integration stories, which the Company believes is an institutional signal that its inclusion reflects growing interest in highly liquid, community-driven assets beyond BTC and ETH.

# DOGECOIN OVERVIEW

Dogecoin is a decentralized, open-source digital currency with a growing user base and community alongside Bitcoin.

## What is Dogecoin Mining?

Dogecoin mining is how new Dogecoins are created. To mine Dogecoin, powerful hardware solves complex math puzzles. Solving these puzzles secures the network and confirms transactions. The miners are rewarded with new Dogecoins for doing this work. The more machines you have online, the faster you will solve the puzzles and the more Dogecoin you will be rewarded.

<u>Market Cap</u>	<u>Market Cap Rank</u>	<u>Dogecoin Wallets</u>	<u>Circulating Supply</u>	<u>Current Network Hashrate</u> <small>April 2, 2026</small>
<b>\$14.6B</b>	<b>#9</b>	<b>8M</b>	<b>153B</b>	<b>2.5PH/s</b>

### How It’s Used

Dogecoin is used for **Digital Payments** as it continues to become more widely accepted, as an **investment** to store value, and as a **remittance tool** allowing fast, low-cost international money transfers.

### How It’s Different

Dogecoin is intentionally abundant, with 10,000 new coins mined every minute and no maximum supply. It has faster access speeds and more affordable transactions than other cryptocurrencies.

# STRATEGIC PILLARS

A first-mover in the space focused on two strategic pillars:

## DOGECOIN MINING OPERATIONS

- Operate **high-efficiency mining rigs** to validate Dogecoin transactions and earn block rewards
- Produce DOGE at a **cost below market rate**, generating built-in margin
- Scale mining infrastructure to increase monthly DOGE output



## LONG-TERM DOGE ACCUMULATION

- Hold mined DOGE on the balance sheet as a strategic treasury reserve
- Avoid forced selling into weak markets, maximize upside in future cycles
- Build asset value alongside mining growth

## INVESTOR VALUE PROPOSITION



Exposure to Dogecoin's long-term value without needing to own the asset directly



Scarcity-driven positioning: first-mover among public DOGE-focused companies



Clear, disciplined capital allocation focused on infrastructure + asset growth

## PILLAR ONE: DOGECOIN MINING OPERATIONS



Priority Access to Next-Gen Mining Hardware

Low-Cost, Renewable Energy Contracts

Experienced Data Center Operators

The synergistic combination of **in-demand hardware**, **advanced infrastructure requirements**, and **specialized operational expertise** potentially establishes significant barriers to entry within a rapidly expanding and highly lucrative industry.

**United Dogecoin** seeks to employ redundant, low cost power solutions to guarantee uninterrupted operations. Partnered with an industry leading operational team, United Dogecoin expects to be able to scale profitability, minimize downtime and maximize equipment lifespan.

With a commitment to operational excellence and scalability, we bypass barriers to entry and tap into the power of Dogecoin mining.

## DOGECOIN MINING INFRASTRUCTURE

### Powering Profitability Through Strategic Partnership

Our Dogecoin mining operations are powered by a fully integrated, turnkey partnership, giving us direct access to **ultra-low-cost, behind-the-meter renewable energy at a pass through cost of \$0.055/kWh**. By co-locating high-density compute infrastructure at wind, solar, and hydro generation sites, we eliminate grid congestion, transmission fees, and curtailment risk — ensuring fixed-cost power contracts and **95%+ uptime**.

With an operational team that has over **8 years of experience in cryptocurrency mining**, this partnership ensures high uptime, low operating expenses, and a minimal carbon footprint—unlocking long-term profitability in one of the most resilient and community-driven cryptocurrencies.

#### Modular Data Centers

The infrastructure is engineered for high-performance workloads and can rapidly expand from tens to hundreds of megawatts. Fully ESG-compliant and backed by proven, operational assets, this model enables us to scale faster, lower operational costs, and deliver long-term cost predictability in a highly competitive mining environment.



Power Sources



WIND



SOLAR



HYDRO

Strategically located in Texas, a cryptocurrency mining friendly jurisdiction.

Elphapex miners deliver industry-leading performance with substantially lower power consumption and operating costs. Engineered for merged mining, the hardware simultaneously mines Dogecoin and Litecoin using the same hashpower, requiring no additional power or capital expenditure while capturing rewards from both chains

## ElphaPex DG2 DOGE and LTC Miner

The Elphapex DG2 is redefining Scrypt mining with unprecedented efficiency, achieving **0.19 J/MH**.

This is the **first ASIC miner to break the 0.2 J/MH barrier** for Litecoin (LTC) and Dogecoin (DOGE) mining, marking the beginning of the 0.1x efficiency era, setting a new benchmark for next-generation crypto mining hardware.

The ElphaPex DG2 **maximizes mining profitability while reducing operational costs**. With a powerful 20GH/s hashrate and ultra-efficient 3900W power consumption.

Allocation for DG2 futures have been secured direct with the manufacturer. The upgraded 20G hashrate is expected to increase profitability by an estimated 28% in comparison to the DG 1+ 14.4G.

## ElphaPex DG1+ DOGE and LTC Miner

The ElphaPex DG 1+ DOGE and LTC Miner is an ASIC miner designed for Scrypt algorithm, specifically targeting DOGE (Dogecoin) and LTC (Litecoin).

It delivers a maximum hashrate of 14.4Gh/s while consuming 3920W of power, resulting in an energy efficiency of 0.28J/MH



United Dogecoin is pleased to announce the appointment of Payne Cong, Head of Business Development at ElphaPex, the leading manufacturer of Dogecoin and Litecoin mining rigs, to its Board of Directors.

ElphaPex brings a powerful combination of technical expertise, strategic insight, and deep industry connections. As a leader in the crypto mining hardware space and a pioneer in ASIC design, ElphaPex offers unmatched knowledge in optimizing mining efficiency and scalability. Their experience and support adds immense value to our long-term strategy.

**“Dogecoin continues to evolve from a cultural phenomenon into a serious digital asset with staying power. We’re proud to support United Dogecoin, a company poised to become a dominant force in Dogecoin mining and accumulation — a uniquely positioned platform at the intersection of efficiency, scale, and long-term value.”**

- Payne Cong,  
Head of BD at ElphaPex



# ESTIMATED SCALE & PROFITABILITY

Cost of Energy/kwh	\$0.055
ElphaPex DG1+ units	7000
GH/s	14.4
Watts	3920
Price per unit	\$1700
Monthly Mining Revenue	\$1,498,886
Potential Downtime (3%)	\$44,967
Pooling Cost (1%)	\$14,539
Power Cost	\$1,091,545
<b>Monthly Gross Profit</b>	<b>\$347,835</b>

Based off of DOGE \$0.09 USD

Monthly Profit per Miner \$49.69 USD  
Monthly Cost of Electricity per Miner \$155.93 USD

Annual Gross Profit 7000 Miners \$4,174,020 USD

Pricing is at current market evaluation and is subject to change. United Dogecoin intends to dynamically optimize its hardware mix, selecting the most profitable combination of ElphaPex DG1+ and DG2 miners at the time of purchase to maximize operational efficiency and ROI.



## PILLAR TWO: LONG-TERM DOGE ACCUMULATION

Accelerate Growth & Accumulate DOGE. Smart Financing for Strategic Expansion in the Dogecoin Ecosystem

\*ElphaPex DG1+ Miners at partner facility

By mining DOGE at a cost below market price, we leverage operational efficiency to build a core asset base with attractive margins. Rather than selling mined DOGE, we hold it—preserving long-term balance sheet strength and maximizing shareholder value.

Our financing model is intentionally structured to support operations and growth without liquidating mined DOGE. Similar to gold or Bitcoin, we treat DOGE as a strategic hard asset—liquid, decentralized, and poised for long-term appreciation.

## Strategic Alignment

This accumulation-first strategy aligns directly with our core objectives:

- 1
Maximize operational scalability through efficient, low-cost mining
- 2
Retain mined DOGE to build asset value over time
- 3
Reward long-term investors with potential yield and capital appreciation
- 4
Preserve capital flexibility across varying market conditions

## BTC vs DOGE

Feature / Benefit	Bitcoin (BTC)	Dogecoin (DOGE)
Launch Year	2009	2013
Original Purpose	Decentralized digital currency & store of value	Joke/meme coin; later adopted as a light transaction currency
Block Time	10 minutes	1 minute
Transaction Speed	Slower (avg. 7 tx/sec)	Faster (avg. 33 tx/sec)
Transaction Fees	Higher (often \$1–\$5+, higher in congestion)	Lower (typically < \$0.10)
Security (Hashrate)	Extremely high, most secure blockchain	Moderate, shared Script network; smaller ecosystem
Market Capitalization(as of 2025)	\$500–600 billion	\$15–20 billion
Supply Cap	21 million BTC (fixed supply)	Dogecoin has no fixed supply. There are approximately 5 billion DOGE issued each year, which could be in perpetuity
Inflation Rate	Deflationary (limited issuance)	Inflationary (It's a fixed annual issuance, not a percentage so as total supply grows, the inflation rate gradually falls over time)
Adoption	Widely accepted by institutions, merchants, and crypto platforms	Niche use, tipping, and some merchant support (e.g., Tesla for merchandise)
Development Community	Active, well-funded, long-term protocol development	Smaller dev team; development is intermittent and community-driven
Media/Cultural Popularity	High institutional and financial credibility	High pop-culture appeal; meme-driven, backed by celebrities & internet communities
Environmental Impact	High energy usage (Proof of Work)	Lower energy per transaction due to Script + faster blocks, but still PoW

# MANAGEMENT LEADS



**RYAN TRASOLINI**  
Chief Executive Officer/ Executive Chairman

Ryan Trasolini is a pioneer in the digital infrastructure space and a recognized leader in institutional cryptocurrency mining. With over a decade of experience building high growth ventures in emerging markets, he has supplied critical hardware to many of the top publicly traded digital mining companies across the TSX and NASDAQ, directly enabling their rise to market dominance.

A founding shareholder of US Bitcoin Corp, Ryan was part of the company's evolution through its merger of equals with Hut 8 (NASDAQ: HUT), forming a \$6.5B leading digital infrastructure platform in the sector.

He subsequently co-founded American Data Centers alongside the Trump family, which partnered with Hut 8 to create American Bitcoin (NASDAQ: ABTC). His expertise spans strategic M&A, partnership structuring, structured financing, and full cycle business transformation, with a track record not just of advising, but of building, scaling, and taking companies public himself.



**PADRAIG POWER**  
Chief Financial Officer

Padraig Power is a seasoned CFO and financial operator with a track record of building the financial infrastructure that high-growth companies need to scale, attract institutional capital, and withstand rigorous investor scrutiny. Trained at Ernst & Young and AIG, he brings enterprise-grade financial discipline to fast-moving environments; specializing in cash flow management, unit economics, close optimization, and diligence readiness.

As Director at both Hiline and Ecom CFO, he has led multi-client finance teams supporting brands through rapid growth, complex inventory operations, and margin pressures; conditions directly analogous to the capital-intensive, operationally complex nature of crypto mining.

# BOARD OF DIRECTORS



**ANDREW KIGUEL**

Andrew Kiguel is an accomplished executive and entrepreneur. Andrew has co-founded and provided leadership to several technology companies including Hut 8 Mining. Prior to 2018, Andrew spent over 20 years as an investment banker. He currently acts as the CEO and Chairman of Realbotix Corp.



**PAYNE CONG**  
ElphaPex

Payne Cong is a strong thought leader and advocate in the Dogecoin community as the Head of Business Development at ElphaPex, the leading manufacturer for DOGE and Litecoin mining machines.



**ERIC JONES, M.D.**  
Advisor

Eric Jones is an early crypto adopter who has been deeply involved in trading, mining, AI, and Web3 innovation since 2011. With over a decade of experience identifying breakthrough opportunities including early support for DOGE, Bitcoin, Tesla, NVIDIA, and SpaceX; Eric brings strategic insight and conviction to advancing Dogecoin's global mission.



**RUIZHE JIA**  
Advisor

Ruizhe Jia is an Assistant Professor at Stanford University specializing in financial technology and decentralized finance (DeFi). His award-winning research on market design and risk management in digital assets informs global institutions and advances innovation in blockchain, finance and regulation.

# ADVISORS



**DAN KRIZNIC**  
Advisor

Dan Kriznic is the Founder and Chairman of High Standard Capital. He played a key role in the early-stage development and financing of several of the industry's most recognized Bitcoin mining companies, including Hive Blockchain Technologies, Marathon Digital Holdings (formerly Marathon Patent Group), and HashChain Technologies (now DigiPowerX).

Dan was instrumental in structuring and closing the company's pivotal acquisition of 6,000 Antminer S9 miners in 2019, at a time when Marathon's market capitalization was around US \$6.3 million. Following this foundational transaction, Marathon evolved into one of North America's largest Bitcoin mining companies, reaching a market capitalization of roughly US \$7.5 billion by October 2025, representing one of the most significant growth trajectories in the digital-asset mining sector.



# USE OF PROCEEDS



## Use of Proceeds USD

DOGE Miners	\$11,900,000
Legacy Business	\$5,000,000
Closing Costs	\$1,500,000
Working Capital	\$1,600,000
<b>Total use of proceeds</b>	<b>\$20,000,000</b>

Initial closing at a minimum of \$10,000,000, with potential subsequent closings until a maximum of \$20,000,000.

