

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 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): **January 28, 2021**

**Catabasis Pharmaceuticals, Inc.**

(Exact Name of Registrant as Specified in Charter)

**Delaware**  
(State or Other Jurisdiction  
of Incorporation)

**001-37467**  
(Commission  
File Number)

**26-3687168**  
(IRS Employer  
Identification No.)

**100 High Street  
28th Floor  
Boston, Massachusetts**  
(Address of Principal Executive Offices)

**02110**  
(Zip Code)

Registrant's telephone number, including area code: **(617) 349-1971**

(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 (*see* General Instruction A.2. below):

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

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

| Title of each class                       | Trading Symbol(s) | Name of each exchange on which registered |
|---|-------------------|---|
| Common Stock, \$0.001 par value per share | CATB              | 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.

### *Agreement and Plan of Merger*

On January 28, 2021, Catabasis Pharmaceuticals, Inc., a Delaware corporation (“Catabasis” or the “Company”), acquired Quellis Biosciences, Inc., a Delaware corporation (“Quellis”), pursuant to that certain Agreement and Plan of Merger, dated January 28, 2021 (the “Merger Agreement”), by and among Catabasis, Cabo Merger Sub I, Inc., a Delaware corporation and wholly owned subsidiary of Catabasis (“First Merger Sub”), Cabo Merger Sub II, LLC, a Delaware limited liability company and wholly owned subsidiary of Catabasis (“Second Merger Sub”), and Quellis. Pursuant to the Merger Agreement, First Merger Sub merged with and into Quellis, pursuant to which Quellis was the surviving entity and became a wholly owned subsidiary of Catabasis (the “First Merger”). Immediately following the First Merger, Quellis merged with and into Second Merger Sub, pursuant to which Second Merger Sub was the surviving entity (the “Second Merger,” together with the First Merger, the “Merger”). The Merger is intended to qualify as a tax-free reorganization for U.S. federal income tax purposes.

Under the terms of the Merger Agreement, at the closing of the Merger, Catabasis issued to the stockholders of Quellis 3,332,669 shares of the common stock of Catabasis, par value \$0.001 per share (the “Common Stock”), and 50,504 shares of newly designated Series X Preferred Stock (as described below). In addition, Catabasis will assume (i) outstanding Quellis stock options, which shall become options for Catabasis Common Stock, and (ii) a warrant exercisable for Quellis common stock, that will become a warrant to purchase 2,805 shares of Series X Preferred Stock at an exercise price of \$341.70 per share, and 185,136 shares of Common Stock at an exercise price of \$0.35 per share, which warrant is exercisable until December 14, 2030.

Reference is made to the discussion of the Series X Preferred Stock in Item 5.03 of this Current Report on Form 8-K, which is incorporated into this Item 1.01 by reference.

Pursuant to the Merger Agreement, Catabasis has agreed to hold a stockholders’ meeting to submit the following matters to its stockholders for their consideration: (i) the approval of the conversion of the Series X Preferred Stock into shares of Common Stock in accordance with Nasdaq Listing Rule 5635(a) (the “Conversion Proposal”) and (ii) if necessary or appropriate, the approval of an amendment to the certificate of incorporation of Catabasis to authorize sufficient shares of Common Stock for the conversion of the Series X Preferred Stock issued pursuant to the Merger Agreement and the Purchase Agreement (as described below) and/or to effectuate a reverse stock split (the “Charter Amendment Proposal,” and together with the Conversion Proposal, the “Meeting Proposals”). In connection with these matters, Catabasis intends to file with the U.S. Securities and Exchange Commission (“SEC”) a proxy statement and other relevant soliciting and disclosure materials.

The Board of Directors of Catabasis (the “Board”) approved the Merger Agreement and the related transactions, and the consummation of the Merger was not subject to approval of the Catabasis stockholders.

The foregoing description of the Merger and the Merger Agreement does not purport to be complete and is qualified in its entirety by reference to the Merger Agreement, which is filed as Exhibit 2.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The Merger Agreement has been included to provide investors and security holders with information regarding its terms. It is not intended to provide any other factual information about Catabasis or Quellis. The Merger Agreement contains representations, warranties and covenants that Catabasis and Quellis made to each other as of specific dates. The assertions embodied in those representations, warranties and covenants were made solely for purposes of the Merger Agreement between Catabasis and Quellis and may be subject to important qualifications and limitations agreed to by Catabasis and Quellis in connection with negotiating its terms, including being qualified by confidential disclosures exchanged between the parties in connection with the execution of the Merger Agreement. The representations and warranties may be subject to a contractual standard of materiality that may be different from what may be viewed as material to investors or securityholders, or may have been used for the purpose of allocating risk between Catabasis and Quellis rather than establishing matters as facts. Moreover, information concerning the subject matter of the representations and warranties may change after the date of the Merger Agreement, which subsequent information may or may not be fully reflected in Catabasis’ public disclosures. For the foregoing reasons, no person should rely on the representations and warranties as statements of factual information at the time they were made or otherwise.

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### *Support Agreements*

In connection with the execution of the Merger Agreement, Catabasis and Quellis entered into stockholder support agreements (the “Support Agreements”) with Catabasis’ directors and certain of its officers. The Support Agreements provide that, among other things, each such director or officer has agreed to vote or cause to be voted all of the shares of Common Stock owned by him or her in favor of the Conversion Proposal and any Charter Amendment Proposal at the Catabasis stockholders’ meeting to be held in connection therewith.

The foregoing description of the Support Agreements does not purport to be complete and is qualified in its entirety by reference to the form of the Support Agreement, which is provided as Exhibit A to the Merger Agreement, which is filed as Exhibit 2.1 to this Current Report on Form 8-K and incorporated herein by reference.

### *Lock-up Agreements*

Concurrently and in connection with the execution of the Merger Agreement, those individuals who will be serving as an officer or director of Catabasis immediately after the Merger and the directors and officers of Quellis immediately prior to the Merger entered into lock-up agreements with Catabasis, pursuant to which each stockholder will be subject to a 180-day lockup on the sale or transfer of shares of Common Stock held by each such stockholder at the closing of the Merger, including those shares issued in the Merger (the “Lock-up Agreements”).

The foregoing description of the Lock-up Agreements does not purport to be complete and is qualified in its entirety by reference to the form of the Lock-up Agreement, which is provided as Exhibit B to the Merger Agreement, which is filed as Exhibit 2.1 to this Current Report on Form 8-K and incorporated herein by reference.

### *Private Placement and Stock Purchase Agreement*

On January 28, 2021, Catabasis entered into a Stock Purchase Agreement (the “Purchase Agreement”) with certain institutional and accredited investors (the “Investors”). Pursuant to the Purchase Agreement, Catabasis agreed to sell an aggregate of approximately 35,573 shares of Series X Preferred Stock for an aggregate purchase price of approximately \$110.0 million (collectively, the “Financing”). Subject to stockholder approval, each share of Series X Preferred Stock is convertible into 1,000 shares of Common Stock, as described below. The preferences, rights and limitations initially applicable to the Series X Preferred Stock are set forth in the Certificate of Designation (as described below).

Reference is made to the discussion of the Series X Preferred Stock issued in the Financing in Item 3.02 of this Current Report on Form 8-K, which is incorporated into this Item 1.01 by reference.

The closing of the Financing is expected to occur on February 1, 2021.

The foregoing summary of the Purchase Agreement does not purport to be complete and is qualified in its entirety by reference to the Purchase Agreement, which is filed as Exhibit 10.1 to this Current Report on Form 8-K.

### *Registration Rights Agreement*

On the closing of the Financing, Catabasis intends to enter into a Registration Rights Agreement (the “Registration Rights Agreement”) with the Investors. Pursuant to the Registration Rights Agreement, Catabasis will prepare and file a resale registration statement with the SEC within 90 calendar days following the closing of the Financing (the “Filing Deadline”). Catabasis will use its reasonable best efforts to cause this registration statement to be declared effective by the SEC within 30 calendar days of the Filing Deadline (or within 60 calendar days if the SEC reviews the registration statement).

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Catabasis will also agree, among other things, to indemnify the Investors, their officers, directors, members, employees and agents, successors and assigns under the registration statement from certain liabilities and pay all fees and expenses (excluding any legal fees of the selling holder(s), and any underwriting discounts and selling commissions) incident to Catabasis' obligations under the Registration Rights Agreement.

The foregoing summary of the Registration Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the form of Registration Rights Agreement, which is filed as Exhibit 10.2 to this Current Report on Form 8-K.

#### **Item 2.01 Completion of Acquisition or Disposition of Assets.**

On January 28, 2021, Catabasis completed its acquisition of Quellis. The information contained in Item 1.01 of this Current Report on Form 8-K regarding the acquisition of Quellis is incorporated by reference into this Item 2.01.

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

The information contained in Item 1.01 of this Current Report on Form 8-K is incorporated by reference into this Item 3.02. The Common Stock and Series X Preferred Stock issued in the Merger and the Financing (collectively, the "Securities") were offered and sold in transactions exempt from registration under the Securities Act, in reliance on Section 4(a)(2) thereof and/or Regulation D thereunder, in each case as transactions by an issuer not involving a public offering. Each of the former Quellis stockholders and the Investors is an "accredited investor," as defined in Regulation D, and is acquiring the Securities for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof, and appropriate legends have been affixed to the Securities.

The Securities have not been registered under the Securities Act and such Securities may not be offered or sold in the United States absent registration or an exemption from registration under the Securities Act and any applicable state securities laws. Neither this Current Report on Form 8-K nor any of the exhibits attached hereto is an offer to sell or the solicitation of an offer to buy shares of common stock or any other securities of Quellis.

#### **Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.**

##### **Resignation of Director**

On January 28, 2021, immediately prior to the effective time of the First Merger (the "Effective Time"), Burt Adelman resigned from the Board. The resignation was in connection with the Merger and was not due to any disagreement or dispute relating to the Company's operations, policies or practices.

##### **Appointment of Directors**

In accordance with the Merger Agreement, on January 28, 2021, effective as of the Effective Time, the Board increased the size of the Board by one member, such that the number of directors that comprised the full Board was eight (8), and appointed Jonathan Violin and Fred Callori to the Board as directors. Dr. Violin will serve as a Class III director with a term expiring at the Company's 2021 annual meeting of the stockholders of the Company and until such time as his successor is duly elected and qualified, or until his earlier death, resignation or removal. Mr. Callori will serve as a Class I director with a term expiring at the Company's 2022 annual meeting of the stockholders of the Company and until such time as his successor is duly elected and qualified, or until his earlier death, resignation or removal.

**Jonathan Violin** (Age 45). Dr. Violin is a co-founder of Quellis, and prior to the Merger, was its Treasurer and Secretary since December 2018 and President from December 2018 to December 2020. Dr. Violin has served as President and Chief Executive Officer of Viridian Therapeutics, Inc. (formerly, Miragen Therapeutics, Inc., "Viridian"), a publicly traded biotechnology company, since January 2021, and was previously President and Chief Operating Officer of Viridian, from October 2020 until January 2021. Dr. Violin co-founded Viridian Therapeutics, Inc., a privately held biotechnology company (which was acquired by Miragen Therapeutics, Inc.), leading its operations since its founding in 2020. Dr. Violin also co-founded Dianthus Therapeutics, Inc., a biotechnology company, in May 2019 and co-founded and helped lead Trevena Inc., a biotechnology company, in various roles from 2008 until November 2018, most recently as SVP, Scientific Affairs and Investor Relations Officer. Dr. Violin holds a Ph.D. from the Department of Pharmacology at the University of California, San Diego, a Master of Business Administration with a concentration in Health Sector Management from the Fuqua School of Business, and a Bachelor of Sciences in Chemical Pharmacology from Duke University.

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Upon his appointment to the Board, Dr. Violin was appointed to the Science and Technology Committee of the Board.

**Fred Callori** (Age 53). Since September 2017, Mr. Callori has served as Senior Vice President, Corporate Development at Xontogeny, LLC, life sciences accelerator. Mr. Callori is also a partner in the Perceptive Xontogeny Venture Fund. Prior to Xontogeny and Perceptive, Mr. Callori was a partner in the Life Science and Emerging Companies practices of Choate, Hall & Stewart LLP. Mr. Callori holds a J.D. from Boston University School of Law and a B.A. in Economics from Binghamton University.

Upon his appointment to the Board, Mr. Callori was appointed to the Compensation Committee of the Board and the Nominating and Corporate Governance Committee of the Board.

#### **Consulting Agreement with Dr. Violin**

Dr. Violin entered into a Consulting Agreement with Quellis dated December 26, 2017 (as amended, the “Consulting Agreement”), which became an obligation of Second Merger Sub upon the effectiveness of the Merger. Under the Consulting Agreement, Dr. Violin is entitled to payments of \$4,167 per month for services related to the research, development, commercialization and manufacture of any antibody, protein or peptide to treat human disease by binding human plasma kallikrein. The Consulting Agreement expires on March 31, 2022, unless sooner terminated in accordance with its terms.

#### **Indemnification Agreements**

In connection with their appointment as directors, each of Dr. Violin and Mr. Callori entered into the Company’s standard form of indemnification agreement, a copy of which was filed as Exhibit 10.15 to the Company’s Registration Statement on Form S-1 (File No. 333-204144) filed with the Securities and Exchange Commission on May 13, 2015.

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

On January 28, 2021, Catabasis filed a Certificate of Designation of Preferences, Rights and Limitations of the Series X Preferred Stock with the Secretary of State of the State of Delaware (the “Certificate of Designation”) in connection with the Merger and the Financing referenced in Item 1.01 above. The Certificate of Designation establishes the rights of the shares of Series X Convertible Preferred Stock, par value \$0.001 per share (the “Series X Preferred Stock”), which is intended to have economic rights equivalent to the Common Stock, but has only limited voting rights.

Holders of Series X Preferred Stock are entitled to receive dividends on shares of Series X Preferred Stock equal, on an as-if-converted-to-Common-Stock basis, and in the same form as dividends actually paid on shares of the Common Stock. Subject to stockholder approval of the Conversion Proposal, the Series X Preferred Stock is convertible into Common Stock at rate of 1,000 shares of Common Stock for every one share of Series X Preferred Stock that is converted. Except as otherwise required by law, the Series X Preferred Stock does not have voting rights. However, as long as any shares of Series X Preferred Stock are outstanding, Catabasis will not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series X Preferred Stock, (i) alter or change adversely the powers, preferences or rights given to the Series X Preferred Stock or alter or amend the Certificate of Designation, amend or repeal any provision of, or add any provision to, the Certificate of Incorporation or bylaws of the Company, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Series X Preferred Stock, (ii) issue further shares of Series X Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series X Preferred Stock, or (iii) enter into any agreement with respect to any of the foregoing. Additionally, the approval of the holders of a majority of the Series X Preferred Stock is required for certain change of control transactions, provided that this approval right will terminate upon stockholder approval of the Conversion Proposal. The Series X Preferred Stock does not have a preference upon any liquidation, dissolution or winding-up of Catabasis.

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Following stockholder approval of the Conversion Proposal, (i) effective as of 5:00 p.m. (New York City time) on the fourth business day after the date on which such stockholder approval is received, each share of Series X Preferred Stock then outstanding automatically converts into 1,000 shares of Common Stock, and (ii) at any time thereafter at the option of the holder thereof, into 1,000 shares of Common Stock, in the case of each of (i) and (ii) subject to certain beneficial ownership limitations, including that a holder of Series X Preferred Stock is prohibited from converting shares of Series X Preferred Stock into shares of Common Stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be initially set at 9.99% and thereafter adjusted by the holder between to a number between 4.99% and 19.99%) of the total number of shares of Common Stock issued and outstanding immediately after giving effect to such conversion.

The foregoing description of the Series X Preferred Stock does not purport to be complete and is qualified in its entirety by reference to the Certificate of Designation, a copy of which is filed as Exhibit 3.1 to this Current Report on Form 8-K and is incorporated herein by reference.

#### **Item 7.01 Regulation FD Disclosure.**

On January 29, 2021, Catabasis issued a press release announcing, among other things, the Merger and the execution of the Purchase Agreement and Catabasis made available a presentation to be used with investors to discuss the Merger and the Financing. Copies of the press release and the presentation are furnished as Exhibit 99.1 and Exhibit 99.2 to this Current Report on Form 8-K.

The information in Item 7.01 of this Current Report on Form 8-K, including the information in the press release and the presentation attached as Exhibit 99.1 and Exhibit 99.2, respectively, to this Current Report on Form 8-K, is furnished pursuant to Item 7.01 of Form 8-K and shall not be deemed “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section. Furthermore, the information in Item 7.01 of this Current Report on Form 8-K, including the information in the press release and presentation attached as Exhibit 99.1 and Exhibit 99.2, respectively, to this Current Report on Form 8-K, shall not be deemed to be incorporated by reference in the filings of Catabasis under the Securities Act of 1933, as amended.

#### **Forward-Looking Statements**

Any statements in this Current Report on Form 8-K about future expectations, plans and prospects for the Company, including statements about Company management’s future expectation and other statements containing the words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar expressions, constitute forward-looking statements under applicable securities laws and regulations. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: uncertainties regarding whether the Company will be able to recognize the anticipated benefits of the Merger, costs related to the Merger, the possibility that the Company or Quellis may be adversely affected by other economic, business, and/or competitive factors, and other factors discussed in the “Risk Factors” section of the Company’s quarterly report on Form 10-Q for the period ended September 30, 2020, as filed with the Securities and Exchange Commission and other reports on file with the Securities and Exchange Commission. In addition, the forward-looking statements included in this Current Report on Form 8-K represent the Company’s views as of the date hereof. The Company anticipates that subsequent events and developments will cause the Company’s views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company’s views as of any date subsequent to the date hereof.

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**Item 9.01 Financial Statements and Exhibits**

(d) Exhibits

| <b>Exhibit Number</b> | <b>Description</b>  |
|-----------------------|---|
| <u>2.1* +</u>         | <u><a href="#">Agreement and Plan of Merger, dated January 28, 2021, by and among Catabasis Pharmaceuticals, Inc., Cabo Merger Sub I, Inc., Cabo Merger Sub II, LLC and Quellis Biosciences, Inc.</a></u> |
| <u>3.1</u>            | <u><a href="#">Certificate of Designation of Series X Convertible Preferred Stock</a></u>   |
| <u>10.1+</u>          | <u><a href="#">Stock Purchase Agreement, dated as of January 28, 2021, by and among Catabasis Pharmaceuticals, Inc. and each purchaser identified on Annex A thereto</a></u>                              |
| <u>10.2</u>           | <u><a href="#">Form of Registration Rights Agreement, by and among Catabasis Pharmaceuticals, Inc. and certain purchasers named therein</a></u>   |
| <u>99.1</u>           | <u><a href="#">Press Release of Catabasis Pharmaceuticals, Inc., dated January 29, 2021</a></u>   |
| <u>99.2</u>           | <u><a href="#">Presentation for investor conference call held by Catabasis Pharmaceuticals, Inc. on January 29, 2021</a></u>  |

\* Exhibits and/or schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company hereby undertakes to furnish supplementally copies of any of the omitted exhibits and schedules upon request by the U.S. Securities and Exchange Commission (the "SEC"); provided, however, that the Company may request confidential treatment pursuant to Rule 24b-2 of the Exchange Act for any exhibits or schedules so furnished. A list identifying the contents of all omitted exhibits and schedules can be found on page iii of Exhibit 2.1.

(+) Certain portions of this exhibit (indicated by "[\*\*\*]") have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed.

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**SIGNATURES**

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

CATABASIS PHARMACEUTICALS, INC.

Date: January 29, 2021

By: /s/ Ben Harshbarger  
Ben Harshbarger  
SVP, General Counsel

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**AGREEMENT AND PLAN OF MERGER**

**by and among**

**CATABASIS PHARMACEUTICALS, INC.,**

**CABO MERGER SUB I, INC.,**

**CABO MERGER SUB II, LLC,**

**and**

**QUELLIS BIOSCIENCES, INC.**

**Dated as of January 28, 2021**

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## INDEX OF DEFINED TERMS

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| Common Stock Exchange Ratio                    | 3.1(a)(i)(D)    |
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| Company Bylaws                                 | 4.1(b)          |
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| Company Preferred Stock                        | 4.2(a)          |
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| Company Registered IP                          | 4.19(a)         |
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| Lock-Up Agreement                      | Recitals       |
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| Parent Options                        | 5.2(a)       |
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| Parent Plans                          | 5.12(a)      |
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## AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER (this "Agreement"), dated as of January 28, 2021, by and among CATABASIS PHARMACEUTICALS, INC., a Delaware corporation ("Parent"), CABO MERGER SUB I, INC., a Delaware corporation ("First Merger Sub"), CABO MERGER SUB II, LLC, a Delaware limited liability company ("Second Merger Sub") and together with First Merger Sub, "Merger Subs"), and QUELLIS BIOSCIENCES, INC., a Delaware corporation (the "Company").

### RECITALS

WHEREAS, Parent and the Company intend to effect a merger of First Merger Sub with and into the Company (the "First Merger") in accordance with this Agreement and the General Corporation Law of the State of Delaware (the "DGCL"). Upon consummation of the First Merger, First Merger Sub will cease to exist and the Company will become a wholly-owned subsidiary of Parent;

WHEREAS, immediately following the First Merger and as part of the same overall transaction of the First Merger, the Company will merge with and into Second Merger Sub (the "Second Merger" and, together with the First Merger, the "Merger"), with Second Merger Sub being the surviving entity of the Second Merger;

WHEREAS, the parties hereto intend that the First Merger and Second Merger, taken together, will constitute an integrated transaction described in Rev. Rul. 2001-46, 2001-2 C.B. 321 that qualifies as a "reorganization" within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the "Code"), and the Treasury Regulations promulgated thereunder (the "Intended Tax Treatment"), and that this Agreement be, and hereby is, adopted as a "plan of reorganization" for the purposes of Section 368 of the Code and Treasury Regulations Section 1.368-2(g);

WHEREAS, the Board of Directors of the Company has deemed it advisable and in the best interests of the Company and its stockholders that the Company engage in the Merger and the transactions contemplated by this Agreement;

WHEREAS, the Board of Directors of the Company has (i) unanimously approved this Agreement, the First Merger, with the Company continuing as the First Step Surviving Company (as defined below), after the First Effective Time (as defined below), pursuant to which each share of common stock, par value \$0.001 per share, of the Company (the "Company Common Stock") and each share of Company Preferred Stock shall be converted into the right to receive a number of shares of common stock, par value \$0.001 per share, of Parent (the "Parent Common Stock") equal to the Common Stock Exchange Ratio and a number of shares of Series X Convertible Preferred Stock, par value \$0.001 per share, of Parent (the "Parent Convertible Preferred Stock") equal to the Preferred Stock Exchange Ratio, upon the terms and subject to the conditions set forth in this Agreement, subject in any event to Section 3.1(a)(v), and the Second Merger, with Second Merger Sub continuing as the Surviving Company (as defined below) and (ii) resolved to recommend that the Company stockholders adopt this Agreement and approve the Merger;

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WHEREAS, subsequent to such approval by the Board of Directors of the Company, but prior to the execution and delivery of this Agreement, the requisite Company stockholders by written consent and in accordance with the Company's certificate of incorporation, the Company's bylaws and the DGCL (i) adopted this Agreement and approved the Merger, (ii) acknowledged that the approval given thereby is irrevocable and that such stockholder is aware of its rights to demand appraisal for its shares pursuant to Section 262 of the DGCL, a true and correct copy of which was attached thereto, and that such stockholder has received and read a copy of Section 262 of the DGCL and (iii) acknowledged that by its approval of the Merger it is waiving its appraisal rights with respect to its shares in connection with the Merger, and the Company Stockholder Approval is to become effective by its terms immediately following the execution of this Agreement by the parties hereto;

WHEREAS, First Merger Sub is a newly incorporated Delaware corporation that is wholly-owned by Parent, and has been formed for the sole purpose of effecting the First Merger;

WHEREAS, Second Merger Sub is a newly formed Delaware limited liability company that is wholly-owned by Parent, and has been formed for the sole purpose of effecting the Second Merger;

WHEREAS, the respective Boards of Directors of Parent and First Merger Sub and the sole member of Second Merger Sub have each approved this Agreement and the Merger;

WHEREAS, Parent, Merger Subs and the Company each desire to make certain representations, warranties, covenants and agreements in connection with the Merger and also to prescribe certain conditions to the Merger as specified herein;

WHEREAS, concurrently with the execution and delivery of this Agreement and as a condition and inducement to the Company's willingness to enter into this Agreement, the officers, directors and stockholders of Parent listed on Section A of the Parent Disclosure Letter have entered into Support Agreements, dated as of the date of this Agreement, in the form attached hereto as Exhibit A (the "Parent Support Agreements"), pursuant to which such stockholders have, subject to the terms and conditions set forth therein, agreed to vote all of their shares of capital stock of Parent in favor of the Conversion Proposal and the Charter Amendment Proposal;

WHEREAS, concurrently with the execution and delivery of this Agreement and as a condition and inducement to Parent's willingness to enter into this Agreement, the Persons listed on Section A of the Company Disclosure Letter are executing lock-up agreements in the form attached hereto as Exhibit B (the "Lock-Up Agreement"), and collectively, the "Company Lock-Up Agreements");

WHEREAS, concurrently with the execution and delivery of this Agreement and as a condition and inducement to the Company's willingness to enter into this Agreement, the Persons listed on Section B of the Parent Disclosure Letter are executing lock-up agreements in the form attached hereto as Exhibit B (collectively, the "Parent Lock-Up Agreements"); and

WHEREAS, concurrently with the execution of this Agreement, certain investors have entered into a stock purchase agreement representing an aggregate commitment of not less than \$110,000,000 in substantially the form attached hereto as Exhibit C (collectively, the "Stock Purchase Agreement"), pursuant to which such Persons will have agreed, subject to the terms and conditions set forth therein, to subscribe and purchase shares of Parent Convertible Preferred Stock concurrently with the Closing (the "Concurrent Investment").

## AGREEMENT

NOW, THEREFORE, in consideration of the premises, and of the representations, warranties, covenants and agreements contained herein, and intending to be legally bound hereby, Parent, Merger Subs and the Company hereby agree as follows:

### ARTICLE I CERTAIN GOVERNANCE MATTERS

#### Section 1.1 Parent Matters.

(a) Parent Certification of Incorporation. As of the First Effective Time, the Certificate of Incorporation of Parent shall be identical to the Certificate of Incorporation of Parent immediately prior to the First Effective Time, until thereafter amended in accordance with its terms and as provided by applicable Law.

(b) Parent Bylaws. As of the First Effective Time, the Bylaws of Parent shall be identical to the Bylaws of Parent immediately prior to the First Effective Time, until thereafter amended in accordance with their terms and as provided by applicable Law.

(c) Board of Directors. The parties shall take all action necessary (including, to the extent necessary, procuring the resignation or removal of any directors on the Board of Directors of Parent immediately prior to the First Effective Time) so that, as of immediately after the Second Effective Time, the number of directors that comprise the full Board of Directors of Parent shall be eight (8), and such Board of Directors shall immediately after the Second Effective Time initially consist of the individuals listed in Section 1.1(c) of the Parent Disclosure Letter.

(d) Lock-up Agreements. Parent and the Company shall use reasonable best efforts to have each of the Persons that will serve as directors or officers of Parent following the Closing to execute and deliver a Lock-Up Agreement prior to Closing.

(e) Parent Officers. The parties shall take all action necessary (including, to the extent necessary, procuring the resignation or removal of any officers of Parent immediately prior to the First Effective Time) so that, as of the First Effective Time, the Parent officers shall initially consist of the Persons listed in Section 1.1(e) of the Parent Disclosure Letter.

#### Section 1.2 First Step Surviving Company Matters.

(a) First Step Surviving Company Certificate of Incorporation. At the First Effective Time, the Certificate of Incorporation of the First Step Surviving Company shall be amended to read in its entirety as the Certificate of Incorporation of First Merger Sub (except that references to the name of First Merger Sub shall be replaced by references to the name of the First Step Surviving Company), until thereafter amended in accordance with applicable Law.

(b) First Step Surviving Company Bylaws. At the First Effective Time, the Bylaws of the First Step Surviving Company shall be amended to read in their entirety as the Bylaws of First Merger Sub (except that references to the name of First Merger Sub shall be replaced by references to the name of the First Step Surviving Company), until thereafter amended in accordance with applicable Law.

(c) First Step Surviving Company Directors. The directors of First Merger Sub immediately prior to the First Effective Time shall be the directors of the First Step Surviving Company until the earlier of their resignation or removal or until their respective successors are duly elected and qualified.

(d) First Step Surviving Company Officers. The officers of the First Merger Sub immediately prior to the First Effective Time shall be the officers of the First Step Surviving Company until the earlier of their resignation or removal or until their respective successors are duly elected and qualified.

Section 1.3 Surviving Company Matters.

(a) Surviving Company Certificate of Formation Incorporation. At the Second Effective Time, the Certificate of Formation of the Surviving Company shall be identical to the Certificate of Formation of Second Merger Sub as in effect immediately prior to the Second Effective Time until thereafter amended in accordance with applicable Law; provided that the Certificate of Formation of Second Merger Sub shall be amended pursuant to the Second Certificate of Merger solely to replace references to the name of Second Merger Sub by references to the name "QUELLIS BIOSCIENCES, LLC".

(b) Surviving Company Limited Liability Company Agreement. At the Second Effective Time, the limited liability company agreement of the Surviving Company shall be identical to the limited liability company agreement of Second Merger Sub as in effect immediately prior to the Second Effective Time, until thereafter amended in accordance with applicable Law; provided that all references to the name of Second Merger Sub shall be replaced by references to the name "QUELLIS BIOSCIENCES, LLC".

(c) Manager of Surviving Company. The manager of the Surviving Company in accordance with the Certificate of Formation and the limited liability company agreement of Surviving Company, shall be Parent.

**ARTICLE II  
THE MERGER**

Section 2.1 Formation of Merger Subs. Parent has caused the Merger Subs to be organized under the laws of the State of Delaware.

Section 2.2 The Merger. Upon the terms and subject to the conditions set forth in this Agreement and in accordance with the DGCL, at the First Effective Time, First Merger Sub shall be merged with and into the Company. Following the First Merger, the separate corporate existence of First Merger Sub shall cease, and the Company shall continue as the surviving corporation in the Merger (the “First Step Surviving Company”) and a wholly-owned subsidiary of Parent. Upon the terms and subject to the conditions set forth in this Agreement and in accordance with the DGCL and the Delaware Limited Liability Company Act (“DLLCA”), at the Second Effective Time, the First Step Surviving Company will merge with and into Second Merger Sub. Following the Second Merger, the separate existence of the First Step Surviving Company shall cease, and Second Merger Sub will continue as the surviving company in the Second Merger (the “Surviving Company”).

Section 2.3 Closing. The closing of the Merger (the “Closing”) shall take place on the date of this Agreement, or at such other date, time or place as agreed to in writing by Parent and the Company, following the satisfaction or, to the extent permitted by applicable Law, waiver of the conditions set forth in Article VI (subject to the satisfaction or, to the extent permitted by applicable Law, waiver of those conditions), remotely by electronic exchange of documents. The date on which the Closing occurs is referred to in this Agreement as the “Closing Date.”

Section 2.4 Effective Time. Upon the terms and subject to the provisions of this Agreement, at the Closing, (i) the parties shall cause the First Merger to be consummated by executing and filing a certificate of merger with respect to the First Merger (the “First Certificate of Merger”) with the Secretary of State of the State of Delaware (the “Delaware Secretary of State”), executed in accordance with the relevant provisions of the DGCL, and (ii) the parties shall cause the Second Merger to be consummated by executing and filing a certificate of merger with respect to the Second Merger (the “Second Certificate of Merger”) with the Delaware Secretary of State, executed in accordance with the relevant provisions of the DGCL and DLLCA. The First Merger shall become effective at such time as the First Certificate of Merger is duly filed with the Delaware Secretary of State or at such other time as Parent and the Company shall agree in writing and shall specify in the First Certificate of Merger (the time the First Merger becomes effective being the “First Effective Time”). The Second Merger shall become effective at such time as the Second Certificate of Merger is duly filed with the Delaware Secretary of State or at such other time as Parent and the Company shall agree in writing and shall specify in the Second Certificate of Merger (the time the Second Merger becomes effective being the “Second Effective Time”).

Section 2.5 Effects of the Merger. At and after the First Effective Time, the First Merger shall have the effects set forth in this Agreement and in the relevant provisions of the DGCL. Without limiting the generality of the foregoing, and subject thereto, at the First Effective Time, all the property, rights, privileges, powers and franchises of the Company and First Merger Sub shall vest in the First Step Surviving Company, and all debts, liabilities and duties of the Company and First Merger Sub shall become the debts, liabilities and duties of the First Step Surviving Company. At and after the Second Effective Time, the Second Merger shall have the effects set forth in this Agreement and in the relevant provisions of the DGCL and the DLLCA. Without limiting the generality of the foregoing, and subject thereto, at the Second Effective Time, all the property, rights, privileges, powers and franchises of the First Step Surviving Company and Second Merger Sub shall vest in the Surviving Company, and all debts, liabilities and duties of the First Step Surviving Company and Second Merger Sub shall become the debts, liabilities and duties of the Surviving Company.

**ARTICLE III**  
**EFFECT ON THE CAPITAL STOCK OF THE CONSTITUENT COMPANIES;**  
**EXCHANGE OF CERTIFICATES**

Section 3.1      Conversion of Capital Stock.

(a)      At the First Effective Time, by virtue of the First Merger and without any action on the part of Parent, Merger Subs, the Company or the holders of any shares of capital stock of the Parent, Merger Subs or the Company:

(i)      Subject to the terms and conditions of this Agreement (including Section 3.1(a)(v)), each share of Company Common Stock or Company Preferred Stock issued and outstanding immediately prior to the First Effective Time (other than any Excluded Shares or Dissenting Shares) shall thereupon be converted into and become exchangeable for a number of shares of Parent Common Stock equal to the Common Stock Exchange Ratio and a number of shares of Parent Convertible Preferred Stock equal to the Preferred Stock Exchange Ratio (collectively, the "First Merger Consideration"). As of the First Effective Time, all such shares of Company Common Stock and Company Preferred Stock shall no longer be outstanding and shall automatically be cancelled and shall cease to exist, and shall thereafter only represent the right to receive the First Merger Consideration, without interest. For purposes of this Agreement, the following terms have the following respective meanings:

(A)      "Adjusted Parent Common Stock Consideration Cap" means (1) the Parent Common Stock Consideration Cap minus (2) the number of shares of Parent Common Stock subject to such Assumed Common Options.

(B)      "Aggregate Valuation" means the sum of (1) the Company Valuation, plus (2) the Parent Valuation.

(C)      "As-Converted Exchange Ratio" means the ratio (rounded down to six decimal places) equal to the quotient obtained by dividing (1) the Company Merger Shares by (2) the Company Outstanding Shares.

(D)      "Common Stock Exchange Ratio" means the quotient (rounded down to six decimal places) obtained by dividing (1) the Adjusted Parent Common Stock Consideration Cap by (2) the result of (A) the Company Outstanding Shares, minus (B) the number of shares of Company Common Stock subject to outstanding Company Options as of immediately prior to the First Effective Time.

(E)      "Company Allocation Percentage" means the quotient (rounded to six decimal places) determined by dividing (1) the Company Valuation by (2) the Aggregate Valuation.

(F)      "Company Merger Shares" means the product (rounded to the nearest whole share) determined by multiplying (1) the Post-Closing Parent Shares by (2) the Company Allocation Percentage.

(G) “Company Outstanding Shares” means the total number of shares of Company Common Stock outstanding immediately prior to the First Effective Time expressed on a fully diluted and as-converted-to-Company Common Stock basis, assuming, without limitation or duplication, the exercise of all Company Options, Company Warrants and other derivative securities of the Company outstanding as of immediately prior to the First Effective Time.

(H) “Company Valuation” means \$185,000,000.

(I) “Conversion Ratio” means 1,000, which is equal to the number of shares of Parent Common Stock into which each share of Parent Convertible Preferred Stock initially is convertible.

(J) “Lower Parent Net Cash Amount” means (1) if Net Cash is less than the Lower Target Parent Net Cash, the amount that the Target Parent Net Cash exceeds the Net Cash and (2) in all other cases, zero (0).

(K) “Lower Target Parent Net Cash” means \$34,250,000.

(L) “Parent Allocation Percentage” means one (1) minus the Company Allocation Percentage.

(M) “Parent Common Stock Consideration Cap” means the product (rounded down to the nearest whole share) determined by multiplying (1) 19.99% and (2) the total number of shares of Parent Common Stock outstanding immediately prior to the First Effective Time.

(N) “Parent Equity Value” means \$25,000,000.

(O) “Parent Outstanding Shares” means the total number of shares of Parent Common Stock outstanding immediately prior to the First Effective Time expressed on a fully-diluted and as-converted-to-Parent Common Stock basis, and assuming the exercise (using the treasury stock method determined by excluding out-of-the-money options, warrants and other derivative securities) of all options, warrants and other derivative securities of Parent outstanding as of immediately prior to the First Effective Time.

(P) “Parent Valuation” means (1) the Parent Equity Value, plus (2) Target Parent Net Cash minus (3) the Lower Parent Net Cash Amount (if any) plus (4) the Upper Parent Net Cash Amount (if any).

(Q) “Post-Closing Parent Shares” means the quotient (rounded to the nearest whole share) determined by dividing (1) the Parent Outstanding Shares by (2) the Parent Allocation Percentage.

(R) “Preferred Stock Exchange Ratio” means the quotient (rounded up to nine decimal places) obtained by dividing (1) the difference between the As-Converted Exchange Ratio and the Common Stock Exchange Ratio by (2) the Conversion Ratio.

(S) “Target Parent Net Cash” means \$35,000,000.

(T) “Upper Parent Net Cash Amount” means (1) if Net Cash is greater than Upper Target Parent Net Cash, the amount that the Net Cash exceeds the Target Parent Net Cash and (2) in all other cases, zero (0).

(U) “Upper Target Parent Net Cash” means \$35,750,000.

The calculation of each of the “As-Converted Exchange Ratio,” the “Common Stock Exchange Ratio” and the “Preferred Stock Exchange Ratio” is attached hereto as Exhibit D.

(ii) At the First Effective Time, each share of Parent Common Stock issued and outstanding immediately prior to the First Effective Time shall remain outstanding. Immediately following the First Effective Time, shares of Parent Common Stock, if any, owned by the First Step Surviving Company shall be surrendered to Parent without payment therefor.

(iii) Each share of Company Common Stock held in the treasury of the Company or owned, directly or indirectly, by Parent or First Merger Sub immediately prior to the First Effective Time (collectively, “Excluded Shares”) shall automatically be cancelled and shall cease to exist, and no consideration shall be delivered in exchange therefor.

(iv) Each share of common stock, par value \$0.001 per share, of First Merger Sub issued and outstanding immediately prior to the First Effective Time shall be converted into and become one validly issued, fully paid and nonassessable share of common stock, par value \$0.001 per share, of the First Step Surviving Company.

(v) Notwithstanding anything to the contrary in this Agreement, (A) the aggregate number of shares of Parent Common Stock issued pursuant to Section 3.1(a)(i) in exchange for issued and outstanding shares of Company Common Stock or issuable pursuant to Assumed Common Options and Assumed Common Warrants shall not exceed the Parent Common Stock Consideration Cap and (B) to the extent such aggregate number of shares of Parent Common Stock would (but for the application of this clause (v)) exceed the Parent Common Stock Consideration Cap, the Preferred Stock Exchange Ratio and the Common Stock Exchange Ratio shall be equitably adjusted to the minimum extent necessary to avoid such result.

(vi) Notwithstanding anything to the contrary in this Agreement, (A) no fractional shares of Parent Common Stock or fractional shares of Parent Convertible Preferred Stock shall be issued in the First Merger, (B) all fractional shares of Parent Common Stock that a Person otherwise would be entitled to receive as a result of the First Merger shall be aggregated and, if a fractional share results from such aggregation, such Person shall be entitled to receive, in lieu thereof, an amount in cash, without interest, determined by multiplying the fraction of the applicable share of Parent Common Stock to which such Person otherwise would have been entitled by the Parent Closing Price, and (C) all fractional shares of Parent Convertible Preferred Stock that a Person otherwise would be entitled to receive as a result of the First Merger shall be aggregated and, if a fractional share results from such aggregation, such Person shall be entitled to receive, in lieu thereof, an amount in cash, without interest, determined by multiplying the fraction of the applicable share of Parent Convertible Preferred Stock to which such Person otherwise would have been entitled by the product of (1) the Conversion Ratio and (2) the Parent Closing Price.



(b) At the Second Effective Time, by virtue of the Second Merger and without any further action on the part of Parent, the First Step Surviving Company, Second Merger Sub or their respective securityholders, each share of common stock of the First Step Surviving Company issued and outstanding immediately prior to the Second Effective Time shall be cancelled and extinguished without any conversion thereof and no payment or distribution shall be made with respect thereto.

Section 3.2 Treatment of Options and Other Equity-Based Awards and Warrants.

(a) At the First Effective Time, each outstanding option (each, a “Company Option”) to purchase shares of Company Common Stock granted under the Company’s 2019 Stock Incentive Plan (the “Company Equity Plan”), whether vested or unvested, that is outstanding immediately prior to the First Effective Time shall, at the First Effective Time, cease to represent a right to acquire shares of Company Common Stock and shall be assumed and converted, at the First Effective Time, into an option to purchase a number of shares of Parent Common Stock equal to the As-Converted Exchange Ratio, multiplied by the number of shares of Company Common Stock subject to such Company Option as of immediately prior to the First Effective Time, with an exercise price per share equal to the exercise price per share of such Company Option as of immediately prior to the First Effective Time, divided by the As-Converted Exchange Ratio (an “Assumed Common Option”), on terms and conditions (including any vesting or forfeiture and post-termination exercise provisions, but not taking into account any acceleration thereof provided for in the Company Equity Plan or in the related award document by reason of the transactions contemplated hereby) that are otherwise the same as were applicable to such Company Option as of immediately prior to the First Effective Time except as follows: (x) Assumed Common Options held by any consultant of the Company whose engagement is terminated at the Closing shall continue to vest in accordance with the schedule set forth in the applicable award agreement but shall fully vest and become exercisable at the First Effective Time and (y) Assumed Common Options held by each by consultant of the Company whose engagement with the Company continues following the Closing shall fully vest and become exercisable on the earlier to occur between the (A) twelve (12)-month anniversary of the First Effective Time, subject to such individual’s continued services to Parent through such date and (B) the date on which such individual’s services with Parent are terminated by Parent without “cause” (as such term is defined in any written services agreement by and between a such continuing consultant and Parent or if such term is not defined in any such written services agreement, then as such term is defined as of the date hereof in Parent’s Executive Severance Benefits Plan effective April 15, 2016); provided, that in the case of any Company Option to which Section 421 of the Code applies as of the First Effective Time (taking into account the effect of any accelerated vesting thereof, if applicable) by reason of its qualification under Section 422 of the Code, the exercise price, the number of shares of Parent Common Stock subject to such option and the terms and conditions of exercise of such option shall be determined in a manner consistent with the requirements of Section 424(a) of the Code; provided further, that in the case of any Company Option to which Section 409A of the Code applies as of the First Effective Time, the exercise price, the number of shares of Parent Common Stock subject to such option and the terms and conditions of exercise of such option shall be determined in a manner consistent with the requirements of Section 409A of the Code in order to avoid the imposition of any additional Taxes thereunder. The provisions of clause (x) and (y) above shall operate for the benefit of, and shall be enforceable by, each of such consultants.

(b) At the First Effective Time, each warrant entitling the holder to purchase one share of Company Common Stock (each, a “Company Warrant”), whether vested or unvested, that is outstanding immediately prior to the First Effective Time shall, at the First Effective Time, cease to represent a right to acquire shares of Company Common Stock and shall be assumed and converted, at the First Effective Time, into (i) a warrant to purchase a number of shares of Parent Common Stock equal to the Common Stock Exchange Ratio, multiplied by the number of shares of Company Common Stock subject to such Company Warrant as of immediately prior to the First Effective Time, with an exercise price per share equal to the exercise price per share of such Company Option as of immediately prior to the First Effective Time, divided by the As-Converted Exchange Ratio (an “Assumed Common Warrant”), and (ii) a warrant to purchase a number of shares of Parent Convertible Preferred Stock equal to the Preferred Stock Exchange Ratio, multiplied by the number of shares of Company Common Stock subject to such Company Warrant as of immediately prior to the First Effective Time, with an exercise price per share equal to (x) the Conversion Ratio, multiplied by (y) the exercise price per share of such Company Warrant as of immediately prior to the First Effective Time, divided by (z) the As-Converted Exchange Ratio (an “Assumed Preferred Warrant”), in each case on terms and conditions (including any vesting or forfeiture and exercise provisions) that are otherwise the same as were applicable to such Company Warrant as of immediately prior to the First Effective Time.

(c) Prior to the First Effective Time, the Company shall take all action necessary for the adjustment of the Company Options under this Section 3.2. The Company shall use commercially reasonable efforts to ensure that, as of the First Effective Time, no holder of a Company Option (or former holder of a Company Option) or a participant in the Company Equity Plan shall have any rights thereunder to acquire, or other rights in respect of, the capital stock of the Company, the First Step Surviving Company or any of their Subsidiaries, or any other equity interest therein. As soon as practicable after the First Effective Time, Parent shall deliver a notice to holders of Assumed Common Options describing the adjustments set forth in this Section 3.2. To the extent necessary to effect Parent’s obligations under this Section 3.2, Parent shall assume sponsorship of the Company Equity Plan, effective as of the First Effective Time.

(d) Parent shall reserve for issuance a number of shares of Parent Common Stock at least equal to the number of shares of Parent Common Stock that will be subject to Assumed Common Options, Assumed Common Warrants and Assumed Preferred Warrants as a result of the actions contemplated by this Section 3.2. As soon as practicable following the First Effective Time, Parent shall file a registration statement on Form S-8 (or any successor form, or if Form S-8 is not available, other appropriate forms) with respect to the shares of Parent Common Stock that are or may become subject to the Assumed Common Options and shall use its reasonable best efforts to maintain the effectiveness of such registration statement or registration statements (and maintain the current status of the prospectus or prospectuses contained therein) for so long as the Assumed Common Options remain outstanding and such shares of Parent Common Stock are required to be registered.

Section 3.3 Withholding Rights. Parent, First Merger Sub, the First Step Surviving Company and the Surviving Company (each, a “Withholding Agent”) shall each be entitled to deduct and withhold, or cause to be deducted and withheld, from the consideration otherwise payable to any holder of shares of Company Common Stock or otherwise pursuant to this Agreement such amounts as Parent, First Merger Sub, the First Step Surviving Company or the Surviving Company reasonably determines it is required to deduct and withheld under the Code, or any provision of state, local or foreign Tax Law; provided that if a Withholding Agent determines that any payment to any stockholder of the Company hereunder is subject to deduction and/or withholding, then, except with respect to compensatory payments or as a result of a failure to deliver the certificate described in Section 6.6(e), such Withholding Agent shall (i) provide notice to such stockholder as soon as reasonably practicable after such determination and (ii) use commercially reasonable efforts to cooperate with such stockholder prior to Closing to reduce or eliminate any such deduction and/or withholding. To the extent that amounts are so deducted and withheld and are remitted to the applicable taxing authority, such amounts shall be treated for all purposes of this Agreement as having been paid to the Person in respect of whom such deduction and withholding was made.

Section 3.4 Dissenters Rights. Notwithstanding anything in this Agreement to the contrary, each share of the Company Common Stock (other than Excluded Shares) outstanding immediately prior to the First Effective Time and held by a holder who is entitled to demand and has properly demanded appraisal for such shares of the Company Common Stock in accordance with Section 262 of the DGCL (“Dissenting Shares”) shall not be converted into or be exchangeable for the right to receive a portion of the First Merger Consideration unless and until such holder fails to perfect or withdraws or otherwise loses such holder’s right to appraisal and payment under the DGCL. If, after the First Effective Time, any such holder fails to perfect or withdraws or loses such holder’s right to appraisal, such Dissenting Shares shall thereupon be treated as if they had been converted as of the First Effective Time into the right to receive the portion of the First Merger Consideration, if any, to which such holder is entitled pursuant to Section 3.1(a)(i), without interest. The Company shall give Parent (a) prompt notice of any demands received by the Company for appraisal of any shares of the Company Common Stock issued and outstanding immediately prior to the First Effective Time, attempted written withdrawals of such demands, and any other instruments served pursuant to the DGCL and received by the Company relating to stockholders’ rights to appraisal with respect to the First Merger and (b) the opportunity to participate in all negotiations and proceedings with respect to any exercise of such appraisal rights under the DGCL. The Company shall not, except with the prior written consent of Parent, which shall not be unreasonably withheld, conditioned or delayed, voluntarily make any payment with respect to any demands for payment of fair value for capital stock of the Company, offer to settle or settle any such demands or approve any withdrawal of any such demands.

#### **ARTICLE IV REPRESENTATIONS AND WARRANTIES OF THE COMPANY**

Except as set forth in the corresponding section or subsection of the disclosure letter delivered by the Company to Parent (the “Company Disclosure Letter”) (it being agreed that the disclosure of any information in a particular section or subsection of the Company Disclosure Letter shall be deemed disclosure of such information with respect to any other section or subsection of this Agreement to which the relevance of such information is readily apparent on its face), the Company represents and warrants to Parent and Merger Subs as follows:

Section 4.1 Organization, Standing and Power.

(a) The Company (i) is an entity duly organized, validly existing and in good standing under the Laws of the jurisdiction of its organization, (ii) has all requisite corporate or similar power and authority to own, lease and operate its properties and to carry on its business as now being conducted and (iii) is duly qualified or licensed to do business and is in good standing in each jurisdiction in which the nature of its business or the ownership, leasing or operation of its properties makes such qualification or licensing necessary, except in the case of clause (iii), where the failure to be so qualified or licensed or in good standing, individually or in the aggregate, has not had and would not reasonably be expected to have a Company Material Adverse Effect. For purposes of this Agreement, “Company Material Adverse Effect” means any event, change, circumstance, occurrence, effect or state of facts that (A) is or would reasonably be expected to be materially adverse to the business, assets, liabilities, financial condition, results of operations of the Company or (B) materially impairs the ability of the Company to consummate the Merger or any of the other transactions contemplated by this Agreement; provided, however, that in the case of clause (A) only, Company Material Adverse Effect shall not include any event, change, circumstance, occurrence, effect or state of facts to the extent resulting from (1) changes or conditions generally affecting the industries in which the Company operates, or the economy or the financial, debt, banking, capital, credit or securities markets, in the United States, including effects on such industries, economy or markets resulting from any regulatory and political conditions or developments in general, (2) the outbreak or escalation of war or acts of terrorism or any natural disasters, acts of God or comparable events, epidemic, pandemic or disease outbreak (including the COVID-19 virus) or any worsening of the foregoing, or any declaration of martial law, quarantine or similar directive, policy or guidance or Law or other action by any Governmental Entity in response thereto, (3) changes in Law or GAAP, or the interpretation or enforcement thereof, (4) the public announcement of this Agreement, or (5) any specific action taken (or omitted to be taken) by the Company at or with the express written consent of Parent; provided, that, with respect to clauses (1), (2) and (3), the impact of such event, change, circumstance, occurrence, effect or state of facts is not disproportionately adverse to the Company as compared to other participants in the industries in which the Company operates.

(b) The Company has previously made available to Parent true and complete copies of the Company’s Certificate of Incorporation (the “Company Charter”) and Bylaws (the “Company Bylaws”), in each case as amended to the date of this Agreement, and each as so delivered is in full force and effect. The Company is not in violation of any provision of the Company Charter or Company Bylaws. Except with respect to the extent relating to the transactions contemplated by this Agreement or in draft form and except as may be redacted to preserve a privilege (including attorney-client privilege), the Company has made available to Parent true and complete copies of the minutes of all meetings of the Company’s stockholders, the Board of Directors of the Company (the “Company Board”) and each committee of the Company Board held since January 1, 2018.

(a) The authorized capital stock of the Company consists of 2,500,000 shares of Company Common Stock and 1,500,000 shares of preferred stock, par value \$0.001 per share, all of which are designated as Series A Preferred Stock (the "Company Preferred Stock"). As of the date hereof, (i) 752,688 shares of Company Common Stock (excluding treasury shares) were issued and outstanding, (ii) no shares of Company Common Stock were held by the Company in its treasury, (iii) 1,393,966 shares of Company Preferred Stock were issued and outstanding, (iv) no shares of Company Preferred Stock were held by the Company in its treasury, (v) 119,251 shares of Company Common Stock were reserved for issuance pursuant to the Company Equity Plan (of which 13,257 shares were subject to outstanding Company Options), (vi) 119,251 Company Warrants are issued and outstanding, and (vii) 119,251 shares of Company Common Stock were reserved for issuance pursuant to the Company Warrants. All outstanding shares of capital stock of the Company are, and all shares reserved for issuance will be, when issued, duly authorized, validly issued, fully paid and nonassessable and not subject to any preemptive rights. The Company does not have outstanding any bonds, debentures, notes or other obligations having the right to vote (or convertible into, or exchangeable or exercisable for, securities having the right to vote) with the stockholders of the Company on any matter. Except as set forth above in this Section 4.2(a), there are no outstanding (A) shares of capital stock or other voting securities or equity interests of the Company, (B) securities of the Company convertible into or exchangeable or exercisable for shares of capital stock of the Company or other voting securities or equity interests of the Company, (C) stock appreciation rights, "phantom" stock rights, performance units, interests in or rights to the ownership or earnings of the Company or other equity equivalent or equity-based awards or rights, (D) subscriptions, options, warrants, calls, commitments, Contracts or other rights to acquire from the Company, or obligations of the Company to issue, any shares of capital stock of the Company, voting securities, equity interests or securities convertible into or exchangeable or exercisable for capital stock or other voting securities or equity interests of the Company or rights or interests described in the preceding clause (C), or (E) obligations of the Company to repurchase, redeem or otherwise acquire any such securities or to issue, grant, deliver or sell, or cause to be issued, granted, delivered or sold, any such securities. There are no stockholder agreements, voting trusts or other agreements or understandings to which the Company is a party or of which the Company has knowledge with respect to the holding, voting, registration, redemption, repurchase or disposition of, or that restrict the transfer of, any capital stock or other voting securities or equity interests of the Company.

(b) Section 4.2(b) of the Company Disclosure Letter sets forth a true and complete list of all holders, as of the date hereof, of outstanding Company Options and other similar rights to purchase or receive shares of Company Common Stock or similar rights granted under the Company Equity Plan or otherwise (collectively, "Company Stock Awards"), indicating as applicable, with respect to each Company Stock Award then outstanding, the type of award granted, the number of shares of Company Common Stock subject to such Company Stock Award, the name of the plan under which such Company Stock Award was granted, the date of grant, exercise or purchase price, vesting schedule, payment schedule (if different from the vesting schedule) and expiration thereof, and whether (and to what extent) the vesting of such Company Stock Award will be accelerated or otherwise adjusted in any way or any other terms will be triggered or otherwise adjusted in any way by the consummation of the Merger and the other transactions contemplated by this Agreement or by the termination of employment or engagement or change in position of any holder thereof following or in connection with the Merger. Each Company Option intended to qualify as an "incentive stock option" under Section 422 of the Code so qualifies (without reference to the applicable \$100,000 limitation) and the exercise price of each Company Option is no less than the fair market value of a share of Company Common Stock as determined on the date of grant of such Company Option. The Company has made available to Parent a true and complete copy of the Company Equity Plan and the forms of all award agreements evidencing outstanding Company Stock Awards. The Company does not sponsor, maintain or administer any employee or director stock option, stock purchase or equity compensation plan or arrangement other than the Company Equity Plan. The Company is under no obligation to issue shares of Company Common Stock pursuant to any employee or director stock option, stock purchase or equity compensation plan or arrangement other than the Company Equity Plan.

Section 4.3      No Subsidiaries. The Company does not have any Subsidiaries. The Company does not own, directly or indirectly, any equity, membership interest, partnership interest, joint venture interest, or other equity or voting interest in, or any interest convertible into, exercisable or exchangeable for any of the foregoing, nor is it under any current or prospective obligation to form or participate in, provide funds to, make any loan, capital contribution, guarantee, credit enhancement or other investment in, or assume any liability or obligation of, any Person.

Section 4.4      Authority.

(a)            The Company has all necessary corporate power and authority to execute, deliver and perform its obligations under this Agreement and to consummate the transactions contemplated hereby. The execution, delivery and performance of this Agreement by the Company and the consummation by the Company of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of the Company and no other corporate proceedings on the part of the Company are necessary to approve this Agreement or to consummate the Merger and the other transactions contemplated hereby, subject, in the case of the consummation of the Merger, to the Company Stockholder Approval. This Agreement has been duly executed and delivered by the Company and, assuming the due authorization, execution and delivery by Parent and Merger Subs, constitutes a valid and binding obligation of the Company, enforceable against the Company in accordance with its terms (except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or similar Laws affecting the enforcement of creditors' rights generally or by general principles of equity).

(b)            The Company Board, at a meeting duly called and held at which all directors of the Company were present, duly and unanimously adopted resolutions (i) determining that the terms of this Agreement, the Merger and the other transactions contemplated hereby are fair to and in the best interests of the Company's stockholders, (ii) approving and declaring advisable this Agreement and the transactions contemplated hereby, including the Merger, (iii) directing that this Agreement be submitted to the stockholders of the Company for adoption, and (iv) resolving to recommend that the Company's stockholders vote in favor of the adoption of this Agreement and the transactions contemplated hereby, including the Merger, which resolutions have not been subsequently rescinded, modified or withdrawn in any way.

(c)            The affirmative vote (or written consent) of (i) the holders of a majority of the shares of Company Common Stock and Company Preferred Stock each outstanding on the record date and entitled to vote thereon, voting as a single class on an as-converted basis, and (ii) the holders of a majority of the shares of Company Preferred Stock outstanding on the record date and entitled to vote thereon, voting as a separate class on an as-converted basis (collectively, the "Company Stockholder Approval"), is the only vote of the holders of any class or series of the Company's capital stock or other securities required in connection with the consummation of the Merger and the other transactions contemplated hereby. Other than the Company Stockholder Approval, no vote of the holders of any class or series of the Company's capital stock or other securities is required in connection with the consummation of any of the transactions contemplated hereby to be consummated by the Company.

(a) The execution, delivery and performance of this Agreement by the Company does not, and the consummation of the Merger and the other transactions contemplated hereby and compliance by the Company with the provisions hereof will not, conflict with, or result in any violation or breach of, or default (with or without notice or lapse of time, or both) under, or give rise to a right of, or result in, termination, cancellation, modification or acceleration of any obligation or to the loss of a benefit under, or result in the creation of any pledge, claim, lien, charge, option, right of first refusal, encumbrance or security interest of any kind or nature whatsoever (including any limitation on voting, sale, transfer or other disposition or exercise of any other attribute of ownership) (collectively, "Liens") in or upon any of the properties, assets or rights of the Company under, or give rise to any increased, additional, accelerated or guaranteed rights or entitlements under, or require any consent, waiver or approval of any Person pursuant to, any provision of (i) the Company Charter or Company Bylaws, (ii) any material bond, debenture, note, mortgage, indenture, guarantee, license, lease, purchase or sale order or other contract, commitment, agreement, instrument, obligation, arrangement, understanding, undertaking, permit, concession or franchise, whether oral or written (each, including all amendments thereto, a "Contract") to which the Company is a party or by which the Company or any of its properties or assets may be bound or (iii) subject to the governmental filings and other matters referred to in Section 4.5(b), any federal, state, local or foreign law (including common law), statute, ordinance, rule, code, regulation, order, judgment, injunction, decree or other legally enforceable requirement ("Law") applicable to the Company or by which the Company or any of its properties or assets may be bound, except as, in the case of clauses (ii) and (iii), as individually or in the aggregate, has not had and would not reasonably be expected to have a Company Material Adverse Effect.

(b) No consent, approval, order or authorization of, or registration, declaration, filing with or notice to, any federal, state, local or foreign government or subdivision thereof or any other governmental, administrative, judicial, arbitral, legislative, executive, regulatory or self-regulatory authority, instrumentality, agency, commission or body (each, a "Governmental Entity") is required by or with respect to the Company in connection with the execution, delivery and performance of this Agreement by the Company or the consummation by the Company of the Merger and the other transactions contemplated hereby or compliance with the provisions hereof, except for (i) the filing with the SEC of such reports under Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as may be required in connection with this Agreement and the transactions contemplated hereby, (ii) such other filings and reports as may be required pursuant to the applicable requirements of the Securities Act of 1933, as amended (the "Securities Act"), the Exchange Act and any other applicable state or federal securities, takeover and "blue sky" laws, (iii) the filing of the First Certificate of Merger with the Delaware Secretary of State as required by the DGCL, (iv) the filing of the Second Certificate of Merger with the Delaware Secretary of State as required by the DGCL and the DLLCA, and (v) such other consents, approvals, orders, authorizations, registrations, declarations, filings or notices the failure of which to be obtained or made, individually or in the aggregate, have not had and would not reasonably be expected to have a Company Material Adverse Effect.

(a) True and complete copies of the (I) audited balance sheet of the Company as of December 31, 2019 and December 31, 2018, and the related audited statements of operations, changes in stockholders' equity and cash flows of the Company, together with all related notes and schedules thereto, accompanied by the reports thereon of the Company's independent auditors (collectively referred to as the "Company Audited Financial Statements"), (II) the unaudited balance sheet of the Company as of December 31, 2018, and the related statements of operations and cash flows of the Company (collectively referred to as the "Company Unaudited Financial Statements") and (III) the unaudited balance sheet of the Company as of September 30, 2020, and the related statements of operations and cash flows of the Company (collectively referred to as the "Company Interim Financial Statements"), are attached hereto as Section 4.6(a) of the Company Disclosure Letter. The Company Audited Financial Statements, the Company Unaudited Financial Statement and the Company Interim Financial Statements (i) are correct and complete in all material respects and have been prepared in accordance with the books and records of the Company; (ii) have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP") applied on a consistent basis throughout the periods indicated (except as may be indicated in the notes thereto); and (iii) fairly present, in all material respects, the financial position, results of operations and cash flows of the Company as at the respective dates thereof and for the respective periods indicated therein, except as otherwise noted therein and subject to, in the case of the Company Unaudited Financial Statements and the Company Interim Financial Statements, the lack of related notes and, solely in the case of the Company Interim Financial Statements, normal and recurring year-end adjustments that will not, individually or in the aggregate, be material.

(b) The books of account and financial records of the Company are true and correct and have been prepared and are maintained in accordance with sound accounting practice.

(c) The Company maintains a system of internal accounting controls consistent with the practices of similarly situated private companies designed 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 the financial statements of the Company in conformity with GAAP and to maintain accountability of the Company's assets, (iii) access to the Company's assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for the Company's assets is compared with the existing assets at regular intervals and appropriate action is taken with respect to any differences. The Company maintains internal control over financial reporting that provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

(d) Since January 1, 2020, neither the Company nor its independent auditors have identified (i) any significant deficiency or material weakness in the design or operation of the system of internal accounting controls utilized by the Company, (ii) any fraud, whether or not material, that involves the Company, the Company's management or other employees who have a role in the preparation of financial statements or the internal accounting controls utilized by the Company or (iii) any claim or allegation regarding any of the foregoing.



Section 4.7 No Undisclosed Liabilities. The Company does not have any liabilities or obligations of any nature, whether accrued, absolute, contingent or otherwise, known or unknown, whether due or to become due and whether or not required to be recorded or reflected on a balance sheet under GAAP, except (a) to the extent accrued or reserved against in the unaudited balance sheet of the Company as of September 30, 2020 (such balance sheet, the “Company Balance Sheet”) and (b) for liabilities and obligations incurred in the ordinary course of business consistent with past practice since the date of the Company Balance Sheet that are not material to the Company. The Company has not applied for or received any funds or incurred any indebtedness pursuant to the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136), enacted March 27, 2020 (the “CARES Act”) or any other economic relief or stimulus legislation or program, or otherwise received any funds or incurred any indebtedness from any Governmental Entity.

Section 4.8 Absence of Certain Changes or Events. Since the date of the Company Balance Sheet: (x) except in connection with execution of this Agreement and the consummation of the transactions contemplated hereby, the Company has conducted its business only in the ordinary course of business consistent with past practice; (y) there has not been any change, event or development or prospective change, event or development that, individually or in the aggregate, has had or would reasonably be expected to have a Company Material Adverse Effect; and (z) the Company has not:

(a) (i) declared, set aside or paid any dividends on, or made any other distributions (whether in cash, stock or property) in respect of, any of its capital stock or other equity interests, (ii) purchased, redeemed or otherwise acquired shares of capital stock or other equity interests of the Company or any options, warrants, or rights to acquire any such shares or other equity interests, or (iii) split, combined, reclassified or otherwise amended the terms of any of its capital stock or other equity interests or issued or authorized the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock or other equity interests (other than the issuance of shares of the Company Common Stock upon the exercise of Company Options or Company Warrants, in accordance with their terms, except for acquisitions of Company Common Stock in satisfaction by holders of Company Options of the applicable exercise price and/or withholding Taxes);

(b) amended or otherwise changed, or authorized or proposed to amend or otherwise change, its certificate of incorporation or by-laws (or similar organizational documents);

(c) adopted or entered into a plan of complete or partial liquidation, dissolution, restructuring, recapitalization or reorganization; or

(d) changed its financial or Tax accounting methods, principles or practices, except insofar as may have been required by a change in GAAP or applicable Law, or revalued any of its material assets.

Section 4.9 Litigation. There is no action, suit, claim, arbitration, investigation, inquiry, grievance or other proceeding (each, an “Action”) (or basis therefor) pending or, to the knowledge of the Company, threatened against or affecting the Company, its properties or assets, or any present or former officer, director or employee of the Company in such individual’s capacity as such, other than any Action that (a) does not involve an amount in controversy in excess of \$100,000 and (b) does not seek material injunctive or other nonmonetary relief. Neither the Company nor any of its properties or assets is subject to any outstanding judgment, order, injunction, rule or decree of any Governmental Entity. There is no Action pending or, to the knowledge of the Company, threatened seeking to prevent, hinder, modify, delay or challenge the Merger or any of the other transactions contemplated by this Agreement.

Section 4.10 Compliance with Laws. The Company is and has been in compliance in all material respects with all Laws applicable to its businesses, operations, properties or assets. The Company has not received, since January 1, 2018, a notice or other written communication alleging or relating to a possible material violation of any Law applicable to its businesses, operations, properties, assets or Company Products (as defined below). The Company has in effect all material permits, licenses, variances, exemptions, applications, approvals, clearances, authorizations, registrations, formulary listings, consents, operating certificates, franchises, orders and approvals (collectively, “Permits”) of all Governmental Entities necessary or advisable for it to own, lease or operate its properties and assets and to carry on its businesses and operations as now conducted, and there has occurred no violation of, default (with or without notice or lapse of time or both) under or event giving to others any right of revocation, non-renewal, adverse modification or cancellation of, with or without notice or lapse of time or both, any such Permit, nor would any such revocation, nonrenewal, adverse modification or cancellation result from the consummation of the transactions contemplated hereby.

Section 4.11 Health Care Regulatory Matters.

(a) The Company, and to the knowledge of the Company, each of its directors, officers, management employees, agents (while acting in such capacity), contract manufacturers, suppliers, and distributors are, and at all times prior hereto were, in material compliance with all health care laws to the extent applicable to the Company or any of its products or activities, including, but not limited to the following: the Federal Food, Drug & Cosmetic Act (“FDCA”); the Public Health Service Act (42 U.S.C. § 201 et seq.), including the Clinical Laboratory Improvement Amendments of 1988 (42 U.S.C. § 263a); the Federal Trade Commission Act (15 U.S.C. § 41 et seq.); the Controlled Substances Act (21 U.S.C. § 801 et seq.); the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)); the civil monetary penalties law (42 U.S.C. § 1320a-7a); the civil False Claims Act (31 U.S.C. § 3729 et seq.); the administrative False Claims Law (42 U.S.C. § 1320a-7b(a)); the Stark law (42 U.S.C. § 1395nn); the Criminal Health Care Fraud Statute (18 U.S.C. § 1347); the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. § 1320d et seq.), as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. § 17921 et seq.); the exclusion laws (42 U.S.C. § 1320a-7); Medicare (Title XVIII of the Social Security Act); Medicaid (Title XIX of the Social Security Act); and the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010 (42 U.S.C. § 18001 et seq.); any regulations promulgated pursuant to such laws; and any other state, federal or ex-U.S. laws, accreditation standards, or regulations governing the manufacturing, development, testing, labeling, advertising, marketing or distribution of biological products, kickbacks, patient or program charges, record-keeping, claims process, documentation requirements, medical necessity, referrals, the hiring of employees or acquisition of services or supplies from those who have been excluded from government health care programs, quality, safety, privacy, security, licensure, accreditation or any other aspect of providing health care, clinical laboratory or diagnostic products or services (“Health Care Laws”). To the knowledge of the Company, there are no facts or circumstances that reasonably would be expected to give rise to any material liability under any Health Care Laws.

(b) The Company is not party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any Governmental Entity.

(c) All applications, notifications, submissions, information, claims, reports and statistical analyses, and other data and conclusions derived therefrom, utilized as the basis for or submitted in connection with any and all requests for a Permit from the U.S. Food and Drug Administration (“FDA”) or other Governmental Entity relating to products that are regulated as drugs, medical devices, or other healthcare products under Health Care Laws, including biological and drug candidates, compounds or products being researched, tested, stored, developed, labeled, manufactured, packed and/or distributed by the Company or any of its Subsidiaries (“Company Products”), including, without limitation, investigational new drug applications, when submitted to the FDA or other Governmental Entity were true, complete and correct in all material respects as of the date of submission and any necessary or required updates, changes, corrections or modification to such applications, submissions, information and data have been submitted to the FDA or other Governmental Entity. The Company does not have knowledge of any facts or circumstances that would be reasonably likely to lead to the revocation, suspension, limitation, or cancellation of a Permit required under Health Care Laws.

(d) All preclinical studies and clinical trials conducted by or, to the knowledge of the Company, on behalf of the Company have been, and if still pending are being, conducted in material compliance with research protocols and all applicable Health Care Laws, including, but not limited to, the FDCA and its applicable implementing regulations at 21 C.F.R. Parts 50, 54, 56, 58, 312 and 314. No clinical trial conducted by or on behalf of the Company has been conducted using any clinical investigators who have been disqualified, debarred or excluded from healthcare programs. No clinical trial conducted by or on behalf of the Company has been terminated or suspended prior to completion, and no clinical investigator who has participated or is participating in, or institutional review board that has or has had jurisdiction over, a clinical trial conducted by or on behalf of the Company has placed a partial or full clinical hold order on, or otherwise terminated, delayed or suspended, such a clinical trial at a clinical research site based on an actual or alleged lack of safety or efficacy of any Company Product or a failure to conduct such clinical trial in compliance with applicable Health Care Laws, their implementing regulations and good clinical practices.

(e) All manufacturing operations conducted by or, to the knowledge of the Company, for the benefit of the Company have been and are being conducted in material compliance with all Permits under applicable Health Care Laws, all applicable provisions of the FDA’s current good manufacturing practice (cGMP) regulations for biological products at 21 C.F.R. Parts 600 and 610 and all comparable foreign regulatory requirements of any Governmental Entity.

(f) The Company has not received any written communication that relates to an alleged violation or noncompliance with any Health Care Laws, including any notification of any pending or threatened claim, suit, proceeding, hearing, enforcement, investigation, arbitration, import detention or refusal, FDA Warning Letter or Untitled Letter, or any action by a Governmental Entity relating to any Health Care Laws. All Warning Letters, Form-483 observations, or comparable findings from other Governmental Entities listed in Section 4.11 of the Company Disclosure Letter have been resolved and closed out to the satisfaction of the applicable Governmental Entity.

(g) There have been no seizures, withdrawals, recalls, detentions, or suspensions of manufacturing, testing, or distribution relating to the Company Products required or requested by a Governmental Entity, or other notice of action relating to an alleged lack of safety, efficacy, or regulatory compliance of the Company Products, or any adverse experiences relating to the Company Products that have been reported to FDA or other Governmental Entity (“Company Safety Notices”), and, to the knowledge of the Company, there are no facts or circumstances that reasonably would be expected to give rise to a Company Safety Notice. All Company Safety Notices listed in Section 4.11(g) of the Company Disclosure Letter have been resolved to the satisfaction of the applicable Governmental Entity.

(h) There are no unresolved Company Safety Notices, and to the knowledge the Company, there are no facts that would be reasonably likely to result in a material Company Safety Notice or a termination or suspension of developing and testing of any of the Company Products.

(i) Neither the Company, nor, to the knowledge of the Company, any officer, employee, agent, or distributor of the Company has made an untrue statement of a material fact or fraudulent or misleading statement to a Governmental Entity, failed to disclose a material fact required to be disclosed to a Governmental Entity, or committed an act, made a statement, or failed to make a statement that would reasonably be expected to provide a basis for the FDA to invoke its policy respecting the “Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities” Final Policy set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto (the “FDA Ethics Policy”). To the knowledge of the Company, none of the aforementioned is or has been under investigation resulting from any allegedly untrue, fraudulent, misleading, or false statement or omission, including data fraud, or had any action pending or threatened relating to the FDA Ethics Policy.

(j) All reports, documents, claims, Permits and notices required to be filed, maintained or furnished to the FDA or any Governmental Entity by the Company have been so filed, maintained or furnished, except where failure to file, maintain or furnish such reports, documents, claims, Permits or notices have not had and would not reasonably be expected to have, individually or in the aggregate, a Company Material Adverse Effect. All such reports, documents, claims, Permits and notices were true and complete in all material respects on the date filed (or were corrected in or supplemented by a subsequent filing).

(k) Neither the Company nor, to the knowledge of the Company, any officer, employee, agent, or distributor of the Company has committed any act, made any statement or failed to make any statement that violates the Federal Anti-Kickback Statute, 28 U.S.C. § 1320a-7b, the Federal False Claims Act, 31 U.S.C. § 3729, other Drug or Health Care Laws, or any other similar federal, state, or ex-U.S. law applicable in the jurisdictions in which the Company Products are sold or intended to be sold.

(l) Neither the Company nor, to the knowledge of the Company, any officer, employee, agent, or distributor of the Company has been convicted of any crime or engaged in any conduct that has resulted, or would reasonably be expected to result, in debarment under applicable Law, including, without limitation, 21 U.S.C. § 335a, or exclusion under 42 U.S.C. § 1320a-7, or any other statutory provision or similar law applicable in other jurisdictions in which the Company Products are sold or intended to be sold. Neither the Company nor, to the knowledge of the Company, any officer, employee, agent or distributor of the Company, has been excluded from participation in any federal health care program or convicted of any crime or engaged in any conduct for which such Person could be excluded from participating in any federal health care program under Section 1128 of the Social Security Act of 1935, as amended, or any similar Health Care Law or program.

Section 4.12      Benefit Plans.

(a) Section 4.12(a) of the Company Disclosure Letter contains a true and complete list of each material “employee benefit plan” (within the meaning of section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”), whether or not subject to ERISA), “multiemployer plans” (within the meaning of ERISA section 3(37)), and all stock purchase, stock option, phantom stock or other equity-based plan, severance, employment, collective bargaining, change-in-control, fringe benefit, bonus, incentive, deferred compensation, supplemental retirement, health, life, or disability insurance, dependent care and all other employee benefit and compensation plans, agreements, programs, policies or other arrangements, whether or not subject to ERISA (including any funding mechanism therefor now in effect or required in the future as a result of the transactions contemplated by this Agreement or otherwise), whether formal or informal, written or oral, legally binding or not, under which any current or former employee, director or consultant of the Company (or any of their dependents) has any present or future right to compensation or benefits or the Company sponsors or maintains, is making contributions to or has any present or future liability or obligation (contingent or otherwise) or with respect to which it is otherwise bound. All such plans, agreements, programs, policies and arrangements shall be collectively referred to as the “Company Plans.” The Company has provided or made available to Parent a current, accurate and complete copy of each material Company Plan, or if such Company Plan is not in written form, a written summary of all of the material terms of such Company Plan. With respect to each Company Plan, the Company has furnished or made available to Parent a current, accurate and complete copy of, to the extent applicable: (i) any related trust agreement or other funding instrument, (ii) the most recent determination letter of the Internal Revenue Service (the “IRS”), (iii) any summary plan description, summary of material modifications, and other similar material written communications (or a written description of any material oral communications) to the employees of the Company concerning the extent of the benefits provided under a Company Plan, and (iv) for the three most recent years and as applicable (A) the Form 5500 and attached schedules, (B) audited financial statements and (C) actuarial valuation reports.

(b) Neither the Company nor any member of its Controlled Group (defined as any organization which is a member of a controlled, affiliated or otherwise related group of entities within the meaning of Code Section 414(b), (c), (m) or (o)) has ever sponsored, maintained, contributed to or been required to contribute to or incurred any liability (contingent or otherwise) with respect to: (i) a “multiemployer plan” (within the meaning of ERISA section 3(37)), (ii) an “employee pension benefit plan,” within the meaning of Section 3(2) of ERISA (“Pension Plan”) that is subject to Title IV of ERISA or Section 412 of the Code, (iii) a Pension Plan which is a “multiple employer plan” as defined in Section 413 of the Code, or (iv) a “funded welfare plan” within the meaning of Section 419 of the Code.

(c) With respect to the Company Plans:

(i) each Company Plan complies in all material respects with its terms and materially complies in form and in operation with the applicable provisions of ERISA and the Code and all other applicable legal requirements;

(ii) each Company Plan intended to be qualified under Section 401(a) of the Code has received a favorable determination, advisory and/or opinion letter, as applicable, from the IRS that it is so qualified and nothing has occurred to the knowledge of the Company since the date of such letter that would reasonably be expected to cause the loss of the sponsor’s ability to rely upon such letter, and nothing has occurred to the knowledge of the Company that would reasonably be expected to result in the loss of the qualified status of such Company Plan;

(iii) there is no material Action (including any investigation, audit or other administrative proceeding) by the Department of Labor, the Pension Benefit Guaranty Corporation (the “PBGC”), the IRS or any other Governmental Entity or by any plan participant or beneficiary pending, or to the knowledge of the Company, threatened, relating to the Company Plans, any fiduciaries thereof with respect to their duties to the Company Plans or the assets of any of the trusts under any of the Company Plans (other than routine claims for benefits);

(iv) none of the Company Plans currently provides, or reflects or represents any liability to provide post-termination or retiree welfare benefits to any person for any reason, except as may be required by Section 601 et seq. of ERISA and Section 4980B(b) of the Code or other applicable similar law regarding health care coverage continuation (collectively, “COBRA”), and none of the Company or any members of its Controlled Group has any liability to provide post-termination or retiree welfare benefits to any person or ever represented, promised or contracted to any employee or former employee of the Company (either individually or to Company employees as a group) or any other person that such employee(s) or other person would be provided with post-termination or retiree welfare benefits, except to the extent required by statute or except with respect to a contractual obligation to reimburse any premiums such person may pay in order to obtain health coverage under COBRA;

(v) each Company Plan is subject exclusively to United States Law; and

(vi) the execution and delivery of this Agreement and the consummation of the Merger will not, either alone or in combination with any other event, (A) entitle any current or former employee, officer, director or consultant of the Company to severance pay, unemployment compensation or any other similar termination payment, or (B) accelerate the time of payment or vesting, or increase the amount of or otherwise enhance any benefit due to any such employee, officer, director or consultant.

(d) The Company is not a party to any agreement, contract, arrangement or plan (including any Company Plan) that may reasonably be expected to result, separately or in the aggregate, in connection with the transactions contemplated by this Agreement (either alone or in combination with any other events), in the payment of any “parachute payments” within the meaning of Section 280G of the Code. There is no agreement, plan or other arrangement to which the Company is a party or by which the Company is otherwise bound to compensate any person in respect of Taxes or other liabilities incurred with respect to Section 409A or 4999 of the Code.

(e) Each Company Plan that is a “nonqualified deferred compensation plan” within the meaning of Section 409A of the Code (or any comparable or similar provision of state, local, or foreign Law) complies in both form and operation in all material respects with the requirements of Section 409A of the Code (or any comparable or similar provision of state, local, or foreign Law) and all applicable IRS guidance issued with respect thereto (and has so complied for the entire period during which Section 409A of the Code has applied to such Company Plan) so that no amount paid or payable pursuant to any such Company Plan is subject to any additional Tax or interest under Section 409A of the Code (or any comparable or similar provision of state, local, or foreign Law).

Section 4.13      Labor and Employment Matters.

(a) The Company is and since January 1, 2018 has been in compliance in all material respects with all applicable Laws relating to labor and employment, including those relating to employment practices, terms and conditions of employment, collective bargaining, disability, immigration, health and safety, wages, hours and benefits, nondiscrimination in employment, workers’ compensation, the collection and payment of withholding and/or payroll Taxes and similar Taxes, unemployment compensation, equal employment opportunity, discrimination, harassment, employee and contractor classification, information privacy and security, and continuation coverage with respect to group health plans. During the preceding three years, there has not been, and as of the date of this Agreement there is not pending or, to the knowledge of the Company, threatened, any labor dispute, work stoppage, labor strike or lockout against the Company by employees.

(b) No employee of the Company is covered by an effective or pending collective bargaining agreement or similar labor agreement. To the knowledge of the Company, there has not been any activity on behalf of any labor union, labor organization or similar employee group to organize any employees of the Company. There are no (i) unfair labor practice charges or complaints against the Company pending before the National Labor Relations Board or any other labor relations tribunal or authority and to the knowledge of the Company no such representations, claims or petitions are threatened, (ii) representation claims or petitions pending before the National Labor Relations Board or any other labor relations tribunal or authority or (iii) grievances or pending arbitration proceedings against the Company that arose out of or under any collective bargaining agreement.

(c) To the knowledge of the Company, no current employee or officer of the Company intends, or is expected, to terminate his or her employment relationship with such entity in connection with or as a result of the transactions contemplated hereby.

(d) During the preceding three years, (i) the Company has not effectuated a “plant closing” (as defined in the Worker Adjustment Retraining and Notification Act of 1988, as amended (the “WARN Act”)) affecting any site of employment or one or more facilities or operating units within any site of employment or facility, (ii) there has not occurred a “mass layoff” (as defined in the WARN Act) in connection with the Company affecting any site of employment or one or more facilities or operating units within any site of employment or facility and (iii) the Company has not engaged in layoffs or employment terminations sufficient in number to trigger application of any similar state, local or foreign law. The Company currently properly classifies and for the past three (3) years has properly classified its employees as exempt or nonexempt in accordance with applicable overtime laws, and no person treated as an independent contractor or consultant by the Company within the past three (3) years should have been properly classified as an employee under applicable Law.

(e) With respect to any current or former employee, officer, consultant or other service provider of the Company, there are no Actions against the Company pending, or to the Company’s knowledge, threatened to be brought or filed, in connection with the employment or engagement of any current or former employee, officer, consultant or other service provider of the Company, including, without limitation, any claim relating to employment discrimination, harassment, retaliation, equal pay, employment classification or any other employment-related matter arising under applicable Laws, except where such action would not, individually or in the aggregate, result in the Company incurring a material liability.

(f) Except with respect to any Company Plan (which subject is addressed in Section 4.12 above), the execution of this Agreement and the consummation of the transactions set forth in or contemplated by this Agreement will not result in any breach or violation of, or cause any payment to be made under, any applicable Laws respecting labor and employment or any collective bargaining agreement to which the Company is a party.

(g) Since January 1, 2018, (i) no allegations of workplace sexual harassment, discrimination or other misconduct have been made, initiated, filed or, to the knowledge of the Company, threatened against the Company or any of its respective current or former directors, officers or senior-level management employees, (ii) to the knowledge of the Company, no incidents of any such workplace sexual harassment, discrimination or other misconduct have occurred, and (iii) the Company has not entered into any settlement agreement related to allegations of sexual harassment, discrimination or other misconduct by any of its directors, officers or employees described in clause (i) hereof or any independent contractor.

(h) The Company is and has at all relevant times been in compliance with (i) COVID-19-related Laws, standards, regulations, orders and guidance (including without limitation relating to business reopening), including those issued and enforced by the Occupational Safety and Health Administration, the Centers for Disease Control, the Equal Employment Opportunity Commission, and any other Governmental Entity; and (ii) the Families First Coronavirus Response Act and any other applicable COVID-19-related leave Law, whether state, local or otherwise.



(a) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Company Material Adverse Effect, (i) the Company has conducted its businesses in compliance with all, and has not violated any, applicable Environmental Laws; (ii) the Company has obtained all Permits of all Governmental Entities and any other Person that are required under any Environmental Law; (iii) there has been no release of any Hazardous Substance by the Company or any other Person in any manner that has given or would reasonably be expected to give rise to any remedial or investigative obligation, corrective action requirement or liability of the Company under applicable Environmental Laws; (iv) the Company has not received any claims, notices, demand letters or requests for information (except for such claims, notices, demand letters or requests for information the subject matter of which has been resolved prior to the date of this Agreement) from any federal, state, local, foreign or provincial Governmental Entity or any other Person asserting that the Company is in violation of, or liable under, any Environmental Law; (v) no Hazardous Substance has been disposed of, arranged to be disposed of, released or transported in violation of any applicable Environmental Law, or in a manner that has given rise to, or that would reasonably be expected to give rise to, any liability under any Environmental Law, in each case, on, at, under or from any current or former properties or facilities owned or operated by the Company or as a result of any operations or activities of the Company at any location and, to the knowledge of the Company, Hazardous Substances are not otherwise present at or about any such properties or facilities in amount or condition that has resulted in or would reasonably be expected to result in liability to the Company under any Environmental Law; and (vi) neither the Company nor any of its respective properties or facilities are subject to, or are threatened to become subject to, any liabilities relating to any suit, settlement, court order, administrative order, regulatory requirement, judgment or claim asserted or arising under any Environmental Law or any agreement relating to environmental liabilities.

(b) As used herein, "Environmental Law" means any Law relating to (i) the protection, preservation or restoration of the environment (including air, surface water, groundwater, drinking water supply, surface and subsurface soils and strata, wetlands, plant and animal life or any other natural resource) or (ii) the exposure to, or the use, storage, recycling, treatment, generation, transportation, processing, handling, labeling, production, release or disposal of Hazardous Substances.

(c) As used herein, "Hazardous Substance" means any substance listed, defined, designated, classified or regulated as a waste, pollutant or contaminant or as hazardous, toxic, radioactive or dangerous or any other term of similar import under any Environmental Law, including but not limited to petroleum.

- (a) The Company has (i) filed all material Tax Returns required to be filed by or on behalf of it (taking into account any applicable extensions thereof) and all such Tax Returns are true, accurate and complete in all material respects; and (ii) paid in full (or caused to be timely paid in full) all material Taxes that are required to be paid by or with respect to it, whether or not such Taxes were shown as due on such Tax Returns.
- (b) All material Taxes not yet due and payable by the Company as of December 31, 2019 have been, in all respects, properly accrued in accordance with GAAP on the Company Audited Financial Statements, and such Company Audited Financial Statements reflect an adequate reserve (in accordance with GAAP) for all material Taxes accrued but unpaid by the Company through the date of such financial statements. Since December 31, 2019, the Company has not incurred, individually or in the aggregate, any liability for Taxes outside the ordinary course of business.
- (c) The Company has not executed any waiver of any statute of limitations on, or extended the period for the assessment or collection of, any material amount of Tax, in each case that has not since expired.
- (d) No material audits or other investigations, proceedings, claims, assessments or examinations by any Governmental Entity (each, a “Tax Action”) with respect to Taxes or any Tax Return of the Company are presently in progress or have been asserted, threatened or proposed in writing. No deficiencies or claims for a material amount of Taxes have been claimed, proposed, assessed or asserted in writing against the Company by a Governmental Entity, other than any such claim, proposal, assessment or assertion that has been satisfied by payment in full, settled or withdrawn.
- (e) Subject to exceptions as would not be material, the Company has timely withheld all Taxes required to have been withheld from payments made (or deemed made) to its employees, independent contractors, creditors, shareholders and other third parties and, to the extent required, such Taxes have been timely paid to the relevant Governmental Entity.
- (f) The Company has not engaged in a “reportable transaction” as set forth in Treasury Regulations § 1.6011-4(b).
- (g) The Company (i) is not a party to or bound by, or has any liability pursuant to, any Tax sharing, allocation, indemnification or similar agreement or obligation, other than any such agreement or obligation which is a customary commercial agreement or obligation entered into in the ordinary course of business with vendors, lessors, lenders or the like the primary purpose of which is unrelated to Taxes (each, an “Ordinary Course Agreement”); (ii) is not and has not been a member of a group (other than a group the common parent of which is the Company) filing a consolidated, combined, affiliated, unitary or similar income Tax Return; (iii) has no liability for the Taxes of any Person (other than the Company) pursuant to Treasury Regulations § 1.1502-6 (or any similar provision of state, local or non-United States Law) as a transferee or successor, by Contract (other than Ordinary Course Agreements) or otherwise by operation of Law; and (iv) is not and has not been treated as a resident for any income Tax purpose, or as subject to Tax by virtue of having a permanent establishment, an office or fixed place of business, in any country other than the country in which it was or is organized.

(h) No private-letter rulings, technical advice memoranda, or similar material agreements or rulings have been requested in writing, entered into or issued by any taxing authority with respect to the Company which rulings remain in effect.

(i) The Company will not be required to include any item of income in, or exclude any item of deduction from, taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of (i) a change in, or use of improper, method of accounting requested or initiated on or prior to the Closing Date, (ii) a “closing agreement” as described in Section 7121 of the Code (or any similar provision of Law) executed on or prior to the Closing Date, (iii) an installment sale or open-transaction disposition made on or prior to the Closing Date, (iv) any deferred intercompany gain or excess-loss account described in Treasury Regulations under Section 1502 of the Code (or any corresponding or similar provision of state, local or foreign income Tax Law), (v) an election under Section 965 of the Code, or (vi) the application of Section 951 or 951A of the Code with respect to income earned or recognized or payments received prior to the Closing.

(j) There are no liens for Taxes upon any of the assets of the Company other than Liens described in clause (i) of the definition of Permitted Liens.

(k) The Company has not distributed stock of another Person or has had its stock distributed by another Person, in a transaction (or series of transactions) that was purported or intended to be governed in whole or in part by Section 355 or 361 of the Code.

(l) The Company has not been a United States real property holding corporation, as defined in Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code.

(m) No material claim has been made in writing by any Governmental Entity in a jurisdiction where the Company does not currently file or has not filed a Tax Return that the Company is or may be subject to taxation by such jurisdiction.

(n) Section 4.15(n) of the Company Disclosure Letter sets forth the entity classification of the Company for U.S. federal income tax purposes. The Company has not made an election or taken any other action to change its federal and state income tax classification from such classification.

(o) To the Company’s knowledge, the Company has not been, is not, and immediately prior to the First Effective Time will not be, treated as an “investment company” within the meaning of Section 368(a)(2)(F) of the Code.

(p) The Company has not taken any action (or agreed to take any action) nor does it know of any fact or circumstance that could reasonably be expected to prevent or impede the Merger from qualifying as a transaction qualifying for the Intended Tax Treatment.

For purposes of this Section 4.15, where the context permits, each reference to the Company shall include a reference to any person for whose Taxes the Company is liable under applicable Law.

Section 4.16 Contracts.

(a) As of the date of this Agreement, there are no Contracts that would constitute a “material contract” (as such term is defined in Item 601(b)(10) of Regulation S-K under the Securities Act), with respect to the Company (assuming the Company was subject to the requirements of the Exchange Act), other than those Contracts identified in Section 4.16(a) of the Company Disclosure Letter, which, for the avoidance of doubt, shall exclude any Company Plans (all such contracts, “Material Contracts”).

(b) (i) Each Material Contract is valid and binding on the Company and to the knowledge of the Company, each other party thereto, and is in full force and effect and enforceable in accordance with its terms; (ii) the Company, and, to the knowledge of the Company, each other party thereto, has performed all material obligations required to be performed by it under each Material Contract; and (iii) there is no material default under any Material Contract by the Company or, to the knowledge of the Company, any other party thereto, and no event or condition has occurred that constitutes, or, after notice or lapse of time or both, would constitute, a material default on the part of the Company or, to the knowledge of the Company, any other party thereto under any such Material Contract, nor has the Company received any notice of any such material default, event or condition. The Company has made available to Parent true and complete copies of all Material Contracts, including all amendments thereto.

Section 4.17 Insurance. The Company is covered by valid and currently effective insurance policies issued in favor of the Company that are customary and adequate for companies of similar size in the industries and locations in which the Company operates. Section 4.17 of the Company Disclosure Letter sets forth, as of the date hereof, a true and complete list of all material insurance policies issued in favor of the Company, or pursuant to which the Company is a named insured or otherwise a beneficiary, as well as any historic incurrence-based policies still in force. With respect to each such insurance policy, (a) such policy is in full force and effect and all premiums due thereon have been paid, (b) the Company is not in breach or default, and has not taken any action or failed to take any action which (with or without notice or lapse of time, or both) would constitute such a breach or default, or would permit termination or modification of, any such policy and (c) to the knowledge of the Company, no insurer issuing any such policy has been declared insolvent or placed in receivership, conservatorship or liquidation. No notice of cancellation or termination has been received with respect to any such policy, nor will any such cancellation or termination result from the consummation of the transactions contemplated hereby.

Section 4.18 Properties.

(a) The Company has good and valid title to, or in the case of leased property and leased tangible assets, a valid leasehold interest in, all of its real properties and tangible assets that are necessary for the Company to conduct its business as currently conducted, free and clear of all Liens other than (i) Liens for current Taxes and assessments not yet past due or the amount or validity of which is being contested in good faith by appropriate proceedings, (ii) mechanics', workmen's, repairmen's, warehousemen's and carriers' Liens arising in the ordinary course of business consistent with past practice and (iii) any such matters of record, Liens and other imperfections of title that do not, individually or in the aggregate, materially impair the continued ownership, use and operation of the assets to which they relate in the business of the Company as currently conducted ("Permitted Liens"). Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Company Material Adverse Effect on the Company, the tangible personal property currently used in the operation of the business of the Company is in good working order (reasonable wear and tear excepted).

(b) The Company has complied with the terms of all leases to which it is a party, and all such leases are in full force and effect, except for any such noncompliance or failure to be in full force and effect that, individually or in the aggregate, has not had and would not reasonably be expected to have a Company Material Adverse Effect. The Company enjoys peaceful and undisturbed possession under all such leases, except for any such failure to do so that, individually or in the aggregate, has not had and would not reasonably be expected to have a Company Material Adverse Effect.

(c) Section 4.18(c) of the Company Disclosure Letter sets forth a true and complete list of (i) all real property owned by the Company and (ii) all real property leased for the benefit of the Company.

(d) This Section 4.18 does not relate to intellectual property, which is the subject of Section 4.19.

Section 4.19 Intellectual Property.

(a) Section 4.19(a) of the Company Disclosure Letter sets forth a true and complete list of all (i) material patents and patent applications; (ii) material trademark registrations and applications; and (iii) material copyright registrations and applications, in each case owned by the Company (collectively, "Company Registered IP") and a true and complete list of all domain names owned or exclusively licensed by the Company. Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Company Material Adverse Effect (A) all of the Company Registered IP is subsisting and, in the case of any Company Registered IP that is registered or issued and to the knowledge of the Company, valid and enforceable, (B) no Company Registered IP is involved in any interference, reissue, derivation, reexamination, opposition, cancellation or similar proceeding and, to the knowledge of the Company, no such action is threatened with respect to any of the Company Registered IP and (C) the Company owns exclusively, free and clear of any and all Liens (other than Permitted Liens), all Company Owned IP, including all Intellectual Property created on behalf of the Company by employees or independent contractors.

(b) Section 4.19(b) of the Company Disclosure Letter accurately identifies (i) all contracts pursuant to which any Company Registered IP are licensed to the Company (other than (A) any non-customized software that (1) is so licensed solely in executable or object code form pursuant to a nonexclusive, internal-use software license and other Intellectual Property associated with such software and (2) is not incorporated into, or material to the development, manufacturing, or distribution of, any of the Company's products or services, (B) any Intellectual Property licensed on a nonexclusive basis ancillary to the purchase or use of equipment, reagents or other materials, (C) any confidential information provided under confidentiality agreements and (D) agreements between Company and its employees in Company's standard form thereof), (ii) the corresponding Company contract pursuant to which such Company Registered IP is licensed to the Company and (iii) whether the license or licenses granted to the Company are exclusive or nonexclusive.

(c) Section 4.19(c) of the Company Disclosure Schedule accurately identifies each Company contract pursuant to which any Person has been granted any license or covenant not to sue under, or otherwise has received or acquired any right (whether or not currently exercisable) or interest in, any Company Registered IP (other than (i) any confidential information provided under confidentiality agreements and (ii) any Company Registered IP nonexclusively licensed to academic collaborators, suppliers or service providers for the sole purpose of enabling such academic collaborator, supplier or service providers to provide services for Company's benefit).

(d) To the knowledge of Company, the Company Registered IP constitutes all Intellectual Property necessary for Company to conduct its business as currently conducted; provided, however, that the foregoing representation is not a representation with respect to non-infringement of Intellectual Property.

(e) The Company has taken commercially reasonable measures to maintain the confidentiality of all information that constitutes or constituted a material Trade Secret of the Company, including requiring all Persons having access thereto to execute written nondisclosure agreements or other binding obligations to maintain confidentiality of such information.

(f) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Company Material Adverse Effect, (i) to the knowledge of the Company, the conduct of the businesses of the Company, including the manufacture, marketing, offering for sale, sale, importation, use or intended use or other disposal of any product as currently sold or under development by Company, has not infringed, misappropriated or diluted, and does not infringe, misappropriate or dilute, any Intellectual Property of any Person, (ii) the Company has not received any written notice or claim asserting or suggesting that any such infringement, misappropriation, or dilution is or may be occurring or has or may have occurred and (iii) to the knowledge of the Company, no Person is infringing, misappropriating, or diluting in any material respect any Company Registered IP.

(g) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Company Material Adverse Effect, (i) the Company has taken commercially reasonable steps to protect the confidentiality and security of the computer and information technology systems used by the Company (the "IT Systems") and the information and transactions stored or contained therein or transmitted thereby, (ii) to the knowledge of the Company, during the past two (2) years, there has been no unauthorized or improper use, loss, access, transmittal, modification or corruption of any such information or data and (iii) during the past two (2) years, there have been no material failures, crashes, viruses, security breaches (including any unauthorized access to any personally identifiable information), affecting the IT Systems.

(h) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Company Material Adverse Effect, (i) to the knowledge of the Company, the Company has at all times complied in all material respects with all applicable Laws relating to privacy, data protection, and the collection, retention, protection, and use of Personal Information (collectively, “Privacy Laws”) collected, used, or held for use by the Company, (ii) during the past two (2) years, no claims have been asserted or, to the knowledge of the Company, threatened in writing against the Company alleging a violation of any Person’s privacy or Personal Information, (iii) neither this Agreement nor the consummation of the transactions contemplated hereby will breach or otherwise violate any applicable Privacy Laws and (iv) the Company has taken commercially reasonable steps to protect the Personal Information collected, used or held for use by the Company against loss and unauthorized access, use, modification, disclosure or other misuse.

(i) To the knowledge of the Company, no government funding, facilities or resources of a university, college, other educational institution or research center or funding from third parties was used in the development of the Company Owned IP, to the knowledge of the Company, exclusively licensed to the Company, and no Governmental Entity, university, college, other educational institution or research center has, to the knowledge of the Company, any claim or right in or to such Intellectual Property.

(j) The execution, delivery and performance by the Company of this Agreement, and the consummation of the transactions contemplated hereby, will not result in the loss of, or give rise to any right of any third party to terminate or modify any of the Company’s rights or obligations under any agreement under which the Company grants to any Person, or any Person grants to the Company, a license or right under or with respect to any Intellectual Property that is material to any of the businesses of the Company.

Section 4.20 State Takeover Statutes. As of the date hereof and at all times on or prior to the First Effective Time, the Company Board has taken all actions so that the restrictions applicable to business combinations contained in Section 203 of the DGCL are, and will be, inapplicable to the execution, delivery and performance of this Agreement and the timely consummation of the Merger and the other transactions contemplated hereby and will not restrict, impair or delay the ability of Parent or Merger Subs, after the First Effective Time, to vote or otherwise exercise all rights as a stockholder of the Company. No other “moratorium,” “fair price,” “business combination,” “control share acquisition” or similar provision of any state anti-takeover Law (collectively, “Takeover Laws”) or any similar anti-takeover provision in the Company Charter or Company Bylaws is, or at the First Effective Time will be, applicable to this Agreement, the Merger or any of the other transactions contemplated hereby.

Section 4.21 No Rights Plan. There is no stockholder rights plan, “poison pill” anti-takeover plan or other similar device in effect to which the Company is a party or is otherwise bound.

Section 4.22 Related Party Transactions. Since January 1, 2018 through the date of this Agreement, there have been no transactions, agreements, arrangements or understandings between the Company, on the one hand, and the Affiliates of the Company, on the other hand, that would be required to be disclosed under Item 404 of Regulation S-K under the Securities Act (assuming the Company was subject to the requirements of the Exchange Act).

Section 4.23 Certain Payments. Neither the Company nor, to the knowledge of the Company, any of its respective directors, executives, representatives, agents or employees (a) has used or is using any corporate funds for any illegal contributions, gifts, entertainment or other unlawful expenses relating to political activity, (b) has used or is using any corporate funds for any direct or indirect unlawful payments to any foreign or domestic governmental officials or employees, (c) has violated or is violating any provision of the Foreign Corrupt Practices Act of 1977, (d) has established or maintained, or is maintaining, any unlawful fund of corporate monies or other properties, or (e) has made any bribe, unlawful rebate, payoff, influence payment, kickback or other unlawful payment of any nature.

Section 4.24 Brokers. No broker, investment banker, financial advisor or other Person, other than as set forth on Section 4.24 of the Company Disclosure Letter, the fees and expenses of which will be paid by the Company, or following the First Effective Time, is entitled to any broker's, finder's, financial advisor's or other similar fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of the Company or any of its Affiliates. The Company has furnished to Parent a true and complete copy of any Contract between the Company and any Person identified on Section 4.24 of the Company Disclosure Letter pursuant to which such Person could be entitled to any payment from the Company relating to the transactions contemplated hereby.

Section 4.25 Stock Purchase Agreement. To the knowledge of the Company, none of its stockholders has entered into any agreement, side letter or other arrangement relating to the Concurrent Investment other than as set forth in the Stock Purchase Agreement. To the knowledge of the Company, (i) the Stock Purchase Agreement will be in full force and effect and will represent a valid, binding and enforceable obligation of each stockholder of the Company and such stockholder's Affiliates to the extent party thereto (except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or similar Laws affecting the enforcement of creditors' rights generally or by general principles of equity) and (ii) no event has occurred which, with or without notice, lapse of time or both, would constitute a breach or default on the part of any stockholder of the Company or such stockholder's Affiliates to the extent party thereto. To the knowledge of the Company, no stockholder of the Company or Affiliate of any stockholder of the Company to the extent party thereto will be unable to satisfy on a timely basis any term of the Stock Purchase Agreement. To the knowledge of the Company, the proceeds of the Concurrent Investment payable by any stockholder of the Company or affiliate of any stockholder of the Company will be made available to Parent immediately prior to or concurrently with the consummation of the Concurrent Investment.

Section 4.26 Accredited Investor Status. Prior to the date of this Agreement each holder of Company Common Stock and Company Preferred Stock in the Company has previously represented to the Company that he, she or it is an "accredited investor" within the meaning of Regulation D, Rule 501(a), promulgated by the SEC under the Securities Act or is not a "U.S. person" within the meaning of Regulation S, Rule 902, promulgated by the SEC under the Securities Act.



Section 4.27 No Other Representations and Warranties. Except for the representations and warranties contained in Article V, the Company acknowledges and agrees that none of Parent, Merger Subs or any other Person on behalf of Parent or Merger Subs makes any other express or implied representation or warranty whatsoever, and specifically (but without limiting the generality of the foregoing) that none of Parent, its Subsidiaries or any other Person on behalf of Parent or Merger Subs makes any representation or warranty with respect to any projections or forecasts delivered or made available to the Company or any of its Representatives of future revenues, results of operations (or any component thereof), cash flows or financial condition (or any component thereof) of Parent (including any such projections or forecasts made available to the Company and Representatives in certain “data rooms” or management presentations in expectation of the transactions contemplated by this Agreement), and the Company has not relied on any such information or any representation or warranty not set forth in Article V.

## ARTICLE V REPRESENTATIONS AND WARRANTIES OF PARENT AND MERGER SUBS

Except (a) as disclosed in the Parent SEC Documents at least three Business Days prior to the date of this Agreement and that is reasonably apparent on the face of such disclosure to be applicable to the representation and warranty set forth herein (other than any disclosures contained or referenced therein under the captions “Risk Factors,” “Forward-Looking Statements,” “Quantitative and Qualitative Disclosures About Market Risk,” and any other disclosures contained or referenced therein of information, factors, or risks that are predictive, cautionary, or forward-looking in nature); or (b) as set forth in the corresponding section or subsection of the disclosure letter delivered by Parent to the Company immediately prior to the execution of this Agreement (the “Parent Disclosure Letter”) (it being agreed that the disclosure of any information in a particular section or subsection of the Parent Disclosure Letter shall be deemed disclosure of such information with respect to any other section or subsection of this Agreement to which the relevance of such information is readily apparent on its face), each of Parent and the Merger Subs represents and warrants to the Company as follows:

### Section 5.1 Organization, Standing and Power.

(a) Each of Parent and First Merger Sub is a corporation duly organized, validly existing and in good standing under the Laws of the jurisdiction of its incorporation and Second Merger Sub is a limited liability company duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation. Each of Parent, First Merger Sub and Second Merger Sub (i) has all requisite corporate power and authority to own, lease and operate its properties and to carry on its business as now being conducted and (ii) is duly qualified or licensed to do business and is in good standing in each jurisdiction in which the nature of its business or the ownership, leasing or operation of its properties makes such qualification or licensing necessary, except in the case of clause (ii), where the failure to be so qualified or licensed or in good standing, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect. For purposes of this Agreement, “Parent Material Adverse Effect” means any event, change, circumstance, occurrence, effect or state of facts that (A) is or would reasonably be expected to be materially adverse to the business, assets, liabilities, financial condition, or results of operations of Parent and its Subsidiaries, taken as a whole, or (B) materially impairs the ability of Parent or Merger Subs to consummate the Merger or any of the other transactions contemplated by this Agreement; provided, however, that in the case of clause (A) only, Parent Material Adverse Effect shall not include any event, change, circumstance, occurrence, effect or state of facts to the extent resulting from (1) changes or conditions generally affecting the industries in which the Parent and its Subsidiaries operate, or the economy or the financial, debt, banking, capital, credit or securities markets, in the United States, including effects on such industries, economy or markets resulting from any regulatory and political conditions or developments in general, (2) the outbreak or escalation of war or acts of terrorism or any natural disasters, acts of God or comparable events, epidemic, pandemic or disease outbreak (including the COVID-19 virus) or any worsening of the foregoing, or any declaration of martial law, quarantine or similar directive, policy or guidance or Law or other action by any Governmental Entity in response thereto, (3) changes in Law or GAAP, or the interpretation or enforcement thereof, (4) the public announcement of this Agreement, or (5) any specific action taken (or omitted to be taken) by the Parent at or with the express written consent of the Company; provided, that, with respect to clauses (1), (2) and (3), the impact of such event, change, circumstance, occurrence, effect or state of facts is not disproportionately adverse to Parent and its Subsidiaries, taken as a whole, as compared to other participants in the industries in which Parent and its Subsidiaries operate.

(b) Parent has previously made available to the Company true and complete copies of the Certificate of Incorporation and Bylaws (or comparable organizational documents) of each of Parent and Merger Subs, and the Certificate of Incorporation and Bylaws (or comparable organizational documents) of each other Subsidiary of Parent, in each case, as amended to the date of this Agreement, and each as so delivered is in full force and effect. None of Parent, First Merger Sub or Second Merger Sub is in violation of any provision of its respective Certificate of Incorporation or Bylaws. Except with respect to the extent relating to the transactions contemplated by this Agreement or in draft form and except as may be redacted to preserve a privilege (including attorney-client privilege), Parent has made available to the Company true and complete copies of the minutes of all meetings of Parent's stockholders, the Board of Directors of Parent (the "Parent Board") and each committee of the Parent Board held since January 1, 2018.

Section 5.2 Capital Stock.

(a) The authorized capital stock of Parent consists of 150,000,000 shares of Parent Common Stock and 5,000,000 shares of Parent Convertible Preferred Stock. As of the close of business on January 26, 2021 (the "Measurement Date"), (i) 20,084,337 shares of Parent Common Stock (excluding treasury shares) were issued and outstanding, (ii) no shares of Parent Common Stock were held by Parent in its treasury, (iii) no shares of Parent Convertible Preferred Stock were issued and outstanding, (iv) no shares of Parent Convertible Preferred Stock were held by Parent in its treasury, and (v) 3,452,776 shares of Parent Common Stock were reserved for issuance pursuant to Parent's Amended and Restated 2008 Equity Incentive Plan (of which 59,647 shares were subject to outstanding options to purchase shares of Parent Common Stock (the "Parent Options")), pursuant to Parent's Amended and Restated 2015 Stock Incentive Plan (of which 1,273,079 shares were subject to outstanding options to purchase shares of Parent Common Stock) and pursuant to Parent's 2015 Employee Stock Purchase Plan (of which no shares were subject to Parent Options). Except as set forth above in this Section 5.2(a), neither Parent nor any of its Subsidiaries has outstanding any bonds, debentures, notes or other obligations having the right to vote (or convertible into, or exchangeable or exercisable for, securities having the right to vote) with the stockholders of Parent or such Subsidiary on any matter. Except as set forth above in this Section 5.2(a) and except for changes since the close of business on the Measurement Date resulting from the exercise of any options as described above, as of the Measurement Date, there are no outstanding (A) shares of capital stock or other voting securities or equity interests of Parent, (B) securities of Parent or any of its Subsidiaries convertible into or exchangeable or exercisable for shares of capital stock of Parent or other voting securities or equity interests of Parent or its Subsidiaries, (C) stock appreciation rights, "phantom" stock rights, performance units, interests in or rights to the ownership or earnings of Parent or its Subsidiaries or other equity-equivalent or equity-based awards or rights, (D) subscriptions, options, warrants, calls, commitments, Contracts or other rights to acquire from Parent or its Subsidiaries, or obligations of Parent or any of its Subsidiaries to issue, any shares of capital stock of Parent or any of its Subsidiaries, voting securities, equity interests or securities convertible into or exchangeable or exercisable for capital stock or other voting securities or equity interests of Parent or its Subsidiaries or rights or interests described in the preceding clause (C), or (E) obligations of Parent or any of its Subsidiaries to repurchase, redeem or otherwise acquire any such securities or to issue, grant, deliver or sell, or cause to be issued, granted, delivered or sold, any such securities.

(b) The authorized capital stock of First Merger Sub consists of 100 shares of common stock, par value \$0.001 per share, of which 100 shares are issued and outstanding, all of which shares are beneficially owned by Parent.

(c) Parent is the sole member of Second Merger Sub and all of the issued and outstanding membership interests of Second Merger Sub are beneficially owned by Parent.

(d) The shares of Parent Capital Stock to be issued pursuant to the Merger will be duly authorized, validly issued, fully paid and nonassessable and not subject to any preemptive rights.

(e) To the knowledge of Parent as of the date of this Agreement and as of the Closing, no “bad actor” disqualifying event described in Rule 506(d)(1)(i)-(viii) of the Securities Act (a “Disqualifying Event”) is applicable to Parent or, to Parent’s knowledge, any Covered Person, except for a Disqualifying Event as to which Rule 506(d)(2)(ii-iv) or (d)(3) of the Securities Act is applicable. “Covered Person” means, with respect to Parent as an “issuer” for purposes of Rule 506 promulgated under the Securities Act, any person listed in the first paragraph of Rule 506(d)(1).

Section 5.3 Subsidiaries. Section 5.3 of the Parent Disclosure Letter sets forth a true and complete list of each Subsidiary of Parent, including its jurisdiction of incorporation or formation. Each of Parent’s Subsidiaries (i) is an entity duly organized, validly existing and in good standing under the Laws of the jurisdiction of its organization, (ii) has all requisite corporate or similar power and authority to own, lease and operate its properties and to carry on its business as now being conducted and (iii) is duly qualified or licensed to do business and is in good standing in each jurisdiction in which the nature of its business or the ownership, leasing or operation of its properties makes such qualification or licensing necessary, except in the case of clause (iii), where the failure to be so qualified or licensed or in good standing, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect. All outstanding shares of capital stock and other voting securities or equity interests of each such Subsidiary are owned, directly or indirectly, by Parent, free and clear of all Liens other than Permitted Liens of Parent and its Subsidiaries. Except for the capital stock of, or other equity or voting interests in, its Subsidiaries, Parent does not own, directly or indirectly, any equity, membership interest, partnership interest, joint venture interest, or other equity or voting interest in, or any interest convertible into, exercisable or exchangeable for any of the foregoing, nor is it under any current or prospective obligation to form or participate in, provide funds to, make any loan, capital contribution, guarantee, credit enhancement or other investment in, or assume any liability or obligation of, any Person.

Section 5.4 Authority.

(a) Each of Parent, First Merger Sub and Second Merger Sub has all necessary corporate power and authority to execute, deliver and perform its obligations under this Agreement and to consummate the Merger and the other transactions contemplated hereby, including the issuance of the shares of Parent Capital Stock to the holders of Company Common Stock as First Merger Consideration (the “Parent Capital Stock Issuance”). The execution, delivery and performance of this Agreement by Parent and Merger Subs and the consummation by Parent and Merger Subs of the Merger and the other transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Parent and Merger Subs and no other corporate proceedings on the part of Parent or Merger Subs are necessary to approve this Agreement or to consummate the Merger and the other transactions contemplated hereby, subject, in the case of the Conversion Proposal and the Charter Amendment Proposal, to (i) the approval by the holders of Parent Common Stock (the “Parent Stockholder Approval”), (ii) the approval of this Agreement by Parent as the sole stockholder of First Merger Sub and (iii) the approval of this Agreement by Parent as the sole member of Second Merger Sub. This Agreement has been duly executed and delivered by Parent, First Merger Sub and Second Merger Sub and, assuming the due authorization, execution and delivery by the Company, constitutes a valid and binding obligation of each of Parent, First Merger Sub and Second Merger Sub, enforceable against each of Parent, First Merger Sub and Second Merger Sub in accordance with its terms (except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or similar Laws affecting the enforcement of creditors’ rights generally or by general principles of equity).

(b) The Parent Board, at a meeting duly called and held at which all directors of Parent were present, duly adopted resolutions (i) determining that the terms of this Agreement, the Merger and the other transactions contemplated hereby are fair to and in the best interests of Parent and its stockholders, and (ii) approving and declaring advisable this Agreement and the transactions contemplated hereby, including the Merger, which resolutions have not been subsequently rescinded, modified or withdrawn in any way.

(c) The Parent Stockholder Approval is the only vote of the holders of any class or series of the Parent capital stock or other securities required in connection with the consummation of the Merger and the other transactions contemplated hereby, including the Parent Capital Stock Issuance. Other than the Parent Stockholder Approval, no vote of the holders of any class or series of the Parent’s capital stock or other securities is required in connection with the consummation of any of the transactions contemplated hereby to be consummated by Parent.

(a) The execution, delivery and performance of this Agreement by each of Parent, First Merger Sub and Second Merger Sub do not, and the consummation of the Merger and the other transactions contemplated hereby and compliance by each of Parent and Merger Subs with the provisions hereof will not, conflict with, or result in any violation or breach of, or default (with or without notice or lapse of time, or both) under, or give rise to a right of, or result in, termination, cancellation, modification or acceleration of any obligation or to the loss of a benefit under, or result in the creation of any Lien in or upon any of the properties, assets or rights of Parent or Merger Subs under, or give rise to any increased, additional, accelerated or guaranteed rights or entitlements under, or require any consent, waiver or approval of any Person pursuant to, any provision of (i) the Certificate of Incorporation or Bylaws of Parent or First Merger Sub, (ii) the Certificate of Formation or limited liability company agreement of Second Merger Sub, (iii) any material Contract to which Parent, First Merger Sub or Second Merger Sub is a party by which Parent, First Merger Sub, Second Merger Sub or any of their respective properties or assets may be bound, or (iv) subject to the governmental filings and other matters referred to in Section 4.5, any material Law or any rule or regulation of Nasdaq applicable to Parent or Merger Subs or by which Parent, Merger Subs or any of their respective properties or assets may be bound, except as, in the case of clauses (ii) and (iii), as individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect.

(b) No consent, approval, order or authorization of, or registration, declaration, filing with or notice to, any Governmental Entity is required by or with respect to Parent or Merger Subs in connection with the execution, delivery and performance of this Agreement by Parent or Merger Subs or the consummation by Parent or Merger Subs of the Merger and the other transactions contemplated hereby or compliance with the provisions hereof, except for (i) the filing with the SEC of such reports under Section 13(a) or 15(d) of the Exchange Act, as may be required in connection with this Agreement and the transactions contemplated hereby, (ii) such other filings and reports as may be required pursuant to the applicable requirements of the Securities Act, the Exchange Act and any other applicable state or federal securities, takeover and “blue sky” laws, (iii) the filing of the First Certificate of Merger with the Delaware Secretary of State as required by the DGCL, (iv) the filing of the Second Certificate of Merger with the Delaware Secretary of State as required by the DGCL and the DLLCA and (v) such other consents, approvals, orders, authorizations, registrations, declarations, filings or notices, the failure of which to be obtained or made, individually or in the aggregate, have not had and would not reasonably be expected to have a Parent Material Adverse Effect.

(c) The Parent Board, the First Merger Sub board and the Second Merger Sub board have taken and will take all actions necessary to ensure that the restrictions applicable to business combinations contained in Section 203 of the DGCL are, and will be, inapplicable to the execution, delivery and performance of this Agreement and to the consummation of the transactions contemplated by this Agreement. No other state takeover statute or similar Law applies or purports to apply to the Merger, this Agreement or any of the other transactions contemplated by this Agreement.

(a) Parent has filed with or furnished to the SEC on a timely basis true and complete copies of all forms, reports, schedules, statements and other documents required to be filed with or furnished to the SEC by Parent since January 1, 2020 (all such documents, together with all exhibits and schedules to the foregoing materials and all information incorporated therein by reference, the “Parent SEC Documents”). As of their respective filing dates (or, if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing), the Parent SEC Documents complied in all material respects with the applicable requirements of the Securities Act, the Exchange Act and the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”), as the case may be, including, in each case, the rules and regulations promulgated thereunder, and none of the Parent SEC Documents contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(b) The financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the Parent SEC Documents (i) have been prepared in a manner consistent with the books and records of Parent and its Subsidiary, (ii) have been prepared in accordance with GAAP (except, in the case of unaudited statements, as permitted by Form 10-Q of the SEC) applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto), (iii) comply as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto and (iv) fairly present in all material respects the consolidated financial position of Parent and its Subsidiaries as of the dates thereof and their respective consolidated results of operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal and recurring year-end audit adjustments that were not, or are not expected to be, material in amount), all in accordance with GAAP and the applicable rules and regulations promulgated by the SEC. Since January 1, 2020, Parent has not made any change in the accounting practices or policies applied in the preparation of its financial statements, except as required by GAAP, SEC rule or policy or applicable Law. The books and records of Parent and its Subsidiaries have been, and are being, maintained in all material respects in accordance with GAAP (to the extent applicable) and any other applicable legal and accounting requirements and reflect only actual transactions.

(c) Parent has established and maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Such disclosure controls and procedures are designed to ensure that information relating to Parent, including its consolidated Subsidiaries, required to be disclosed in Parent’s periodic and current reports under the Exchange Act, is made known to Parent’s chief executive officer and its chief financial officer by others within those entities to allow timely decisions regarding required disclosures as required under the Exchange Act. The chief executive officer and chief financial officer of Parent have evaluated the effectiveness of Parent’s disclosure controls and procedures and, to the extent required by applicable Law, presented in any applicable Parent SEC Document that is a report on Form 10-K or Form 10-Q, or any amendment thereto, its conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by such report or amendment based on such evaluation.

(d) Parent and its Subsidiaries have established and maintain a system of internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) which is effective in providing reasonable assurance regarding the reliability of Parent's financial reporting and the preparation of Parent's financial statements for external purposes in accordance with GAAP. Parent has disclosed, based on its most recent evaluation of Parent's internal control over financial reporting prior to the date hereof, to Parent's auditors and audit committee (i) any significant deficiencies and material weaknesses in the design or operation of Parent's internal control over financial reporting which are reasonably likely to adversely affect Parent's ability to record, process, summarize and report financial information and (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in Parent's internal control over financial reporting. A true, correct and complete summary of any such disclosures made by management to Parent's auditors and audit committee is set forth as Section 5.6(d) of Parent Disclosure Letter.

(e) Since January 1, 2020, (i) neither Parent nor any of its Subsidiaries nor, to the knowledge of the Company, any director, officer, employee, auditor, accountant or representative of the Parent or any of its Subsidiaries has received or otherwise had or obtained knowledge of any material complaint, allegation, assertion or claim, whether written or oral, regarding the accounting or auditing practices, procedures, methodologies or methods of Parent or any of its Subsidiaries or their respective internal accounting controls, including any material complaint, allegation, assertion or claim that Parent or any of its Subsidiaries has engaged in questionable accounting or auditing practices and (ii) no attorney representing Parent or any of its Subsidiaries, whether or not employed by Parent or any of its Subsidiaries, has reported evidence of a material violation of securities Laws, breach of fiduciary duty or similar violation by Parent or any of its Subsidiaries or any of their respective officers, directors, employees or agents to the Parent Board or any committee thereof or to any director or officer of Parent or any of its Subsidiaries.

(f) As of the date of this Agreement, there are no outstanding or unresolved comments in the comment letters received from the SEC staff with respect to the Parent SEC Documents. To the knowledge of Parent, none of the Parent SEC Documents is subject to ongoing review or outstanding SEC comment or investigation.

(g) Neither Parent nor any of its Subsidiaries is a party to, or has any commitment to become a party to, any joint venture, off-balance sheet partnership or any similar Contract (including any Contract or arrangement relating to any transaction or relationship between or among Parent and any of its Subsidiaries, 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 defined in Item 303(a) 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, Parent or any of its Subsidiaries in Parent's or such Subsidiary's published financial statements or other Parent SEC Documents.

(h) Parent is in compliance in all material respects with (i) the provisions of the Sarbanes-Oxley Act and (ii) the rules and regulations of Nasdaq, in each case, that are applicable to Parent.

(i) No Subsidiary of Parent is required to file any form, report, schedule, statement or other document with the SEC.

(j) Parent has not been and is not currently a "shell company" as defined under Section 12b-2 of the Exchange Act.

(k) Parent is, and since its first date of listing on Nasdaq has been, in compliance in all material respects with the applicable current listing and governance rules and regulations of Nasdaq.

Section 5.7 No Undisclosed Liabilities. Neither Parent nor any of its Subsidiaries has any liabilities or obligations of any nature, whether accrued, absolute, contingent or otherwise, known or unknown, whether due or to become due and whether or not required to be recorded or reflected on a balance sheet under GAAP, except (a) to the extent accrued or reserved against in the audited consolidated balance sheet of Parent and its Subsidiaries as at December 31, 2019 included in the Annual Report on Form 10-K filed by Parent with the SEC on March 10, 2020 (without giving effect to any amendment thereto filed on or after the date hereof) and (b) for liabilities and obligations incurred in the ordinary course of business consistent with past practice since December 31, 2019 that are not material to Parent and its Subsidiaries, taken as a whole. Parent has not applied for or received any funds or incurred any indebtedness pursuant to the CARES Act or any other economic relief or stimulus legislation or program, or otherwise received any funds or incurred any indebtedness from any Governmental Entity.

Section 5.8 Absence of Certain Changes or Events. Since December 31, 2019, except in connection with the execution of this Agreement and the consummation of the transactions contemplated hereby, (x) Parent and its Subsidiaries have conducted their business only in the ordinary course of business consistent with past practice; (y) there has not been any change, event or development or prospective change, event or development that, individually or in the aggregate, has had or would reasonably be expected to have a Parent Material Adverse Effect; and (z) neither Parent nor any of its Subsidiaries have:

(a) (i) declared, set aside or paid any dividends on, or made any other distributions (whether in cash, stock or property) in respect of, any of its capital stock or other equity interests, except for dividends by a wholly-owned Subsidiary of Parent to its parent, (ii) purchased, redeemed or otherwise acquired shares of capital stock or other equity interests of Parent or its Subsidiary or any options, warrants, or rights to acquire any such shares or other equity interests, or (iii) split, combined, reclassified or otherwise amended the terms of any of its capital stock or other equity interests or issued or authorized the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock or other equity interests;

(b) amended or otherwise changed, or authorized or proposed to amend or otherwise changed, its certificate of incorporation or by-laws (or similar organizational documents);

(c) adopted or entered into a plan of complete or partial liquidation, dissolution, restructuring, recapitalization or reorganization; or

(d) changed its financial or Tax accounting methods, principles or practices, except insofar as may have been required by a change in GAAP or applicable Law, or revalued any of its material assets.



Section 5.9 Litigation. There is no Action (or basis therefor) pending or, to the knowledge of Parent, threatened against or affecting Parent or any of its Subsidiaries, any of their respective properties or assets, or any present or former officer, director or employee of Parent or any of its Subsidiaries in such individual's capacity as such, other than any Action that (a) does not involve an amount in controversy in excess of \$100,000 and (b) does not seek material injunctive or other nonmonetary relief. Neither Parent nor any of its Subsidiaries nor any of their respective properties or assets is subject to any outstanding judgment, order, injunction, rule or decree of any Governmental Entity. There is no Action pending or, to the knowledge of Parent, threatened seeking to prevent, hinder, modify, delay or challenge the Merger or any of the other transactions contemplated by this Agreement.

Section 5.10 Compliance with Laws. Parent and each of its Subsidiaries are and have been in compliance in all material respects with all Laws applicable to their businesses, operations, properties or assets. None of Parent or any of its Subsidiaries has received, since January 1, 2018, a notice or other written communication alleging or relating to a possible material violation of any Law applicable to their businesses, operations, properties, assets or Parent Products (as defined below). Parent and each of its Subsidiaries have in effect all material Permits of all Governmental Entities necessary or advisable for them to own, lease or operate their properties and assets and to carry on their businesses and operations as now conducted, and there has occurred no violation of, default (with or without notice or lapse of time or both) under or event giving to others any right of revocation, nonrenewal, adverse modification or cancellation of, with or without notice or lapse of time or both, any such Permit, nor would any such revocation, nonrenewal, adverse modification or cancellation result from the consummation of the transactions contemplated hereby.

Section 5.11 Health Care Regulatory Matters.

(a) Parent and, to the knowledge of Parent, each of its directors, officers, management employees, agents (while acting in such capacity), contract manufacturers, suppliers, and distributors are, and at all times prior hereto were, in material compliance with all Health Care Laws to the extent applicable to Parent or any of its products or activities. To the knowledge of Parent, there are no facts or circumstances that reasonably would be expected to give rise to any material liability under any Health Care Laws.

(b) Parent is not party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any Governmental Entity.

(c) All applications, notifications, submissions, information, claims, reports and statistical analyses, and other data and conclusions derived therefrom, utilized as the basis for or submitted in connection with any and all requests for a Permit from the FDA or other Governmental Entity relating to products that are regulated as drugs, medical devices, or other healthcare products under Health Care Laws, including biological and drug candidates, compounds or products being researched, tested, stored, developed, labeled, manufactured, packed and/or distributed by Parent or any of its Subsidiaries ("Parent Products"), including, without limitation, investigational new drug applications, when submitted to the FDA or other Governmental Entity were true, complete and correct in all material respects as of the date of submission and any necessary or required updates, changes, corrections or modification to such applications, submissions, information and data have been submitted to the FDA or other Governmental Entity. Parent does not have knowledge of any facts or circumstances that would be reasonably likely to lead to the revocation, suspension, limitation, or cancellation of a Permit required under Health Care Laws.

(d) All preclinical studies and clinical trials conducted by or, to the knowledge of Parent, on behalf of Parent have been, and if still pending are being, conducted in material compliance with research protocols and all applicable Health Care Laws, including, but not limited to, the FDCA and its applicable implementing regulations at 21 C.F.R. Parts 50, 54, 56, 58, 312 and 314. No clinical trial conducted by or on behalf of Parent has been conducted using any clinical investigators who have been disqualified, debarred or excluded from healthcare programs. No clinical trial conducted by or on behalf of the Company has been terminated or suspended prior to completion, and no clinical investigator who has participated or is participating in, or institutional review board that has or has had jurisdiction over, a clinical trial conducted by or on behalf of Parent has placed a partial or full clinical hold order on, or otherwise terminated, delayed or suspended, such a clinical trial at a clinical research site based on an actual or alleged lack of safety or efficacy of any Parent Product or a failure to conduct such clinical trial in compliance with applicable Health Care Laws, their implementing regulations and good clinical practices.

(e) All manufacturing operations conducted by or, to the knowledge of Parent, for the benefit of Parent have been and are being conducted in material compliance with all Permits under applicable Health Care Laws, all applicable provisions of the FDA's current good manufacturing practice (cGMP) regulations at 21 C.F.R. Parts 210-211 and Parts 600 and 610 and FDA's Quality System (QS) regulations at 21 C.F.R. Part 820, and all comparable foreign regulatory requirements of any Governmental Entity.

(f) Parent has not received any written communication that relates to an alleged violation or noncompliance with any Health Care Laws, including any notification of any pending or threatened claim, suit, proceeding, hearing, enforcement, investigation, arbitration, import detention or refusal, FDA Warning Letter or Untitled Letter, or any action by a Governmental Entity relating to any Health Care Laws. All Warning Letters, Form-483 observations, or comparable findings from other Governmental Entities listed in Section 5.11 of the Parent Disclosure Letter have been resolved and closed out to the satisfaction of the applicable Governmental Entity.

(g) There have been no seizures, withdrawals, recalls, detentions, or suspensions of manufacturing, testing, or distribution relating to the Parent Products required or requested by a Governmental Entity, or other notice of action relating to an alleged lack of safety, efficacy, or regulatory compliance of the Parent Products, or any adverse experiences relating to the Parent Products that have been reported to FDA or other Governmental Entity ("Parent Safety Notices"), and, to the knowledge of Parent, there are no facts or circumstances that reasonably would be expected to give rise to a Parent Safety Notice. All Parent Safety Notices listed in Section 5.11(g) of the Parent Disclosure Letter have been resolved to the satisfaction of the applicable Governmental Entity.

(h) There are no unresolved Parent Safety Notices, and to the knowledge Parent, there are no facts that would be reasonably likely to result in a material Parent Safety Notice or a termination or suspension of developing and testing of any of the Parent Products.

(i) Neither Parent, nor, to the knowledge of Parent, any officer, employee, agent, or distributor of Parent has made an untrue statement of a material fact or fraudulent or misleading statement to a Governmental Entity, failed to disclose a material fact required to be disclosed to a Governmental Entity, or committed an act, made a statement, or failed to make a statement that would reasonably be expected to provide a basis for the FDA to invoke its FDA Ethics Policy. To the knowledge of Parent, none of the aforementioned is or has been under investigation resulting from any allegedly untrue, fraudulent, misleading, or false statement or omission, including data fraud, or had any action pending or threatened relating to the FDA Ethics Policy.

(j) All reports, documents, claims, Permits and notices required to be filed, maintained or furnished to the FDA or any Governmental Entity by Parent have been so filed, maintained or furnished, except where failure to file, maintain or furnish such reports, documents, claims, Permits or notices has not had and would not reasonably be expected to have, individually or in the aggregate, a Parent Material Adverse Effect. All such reports, documents, claims, Permits and notices were true and complete in all material respects on the date filed (or were corrected in or supplemented by a subsequent filing).

(k) Neither Parent nor, to the knowledge of Parent, any officer, employee, agent, or distributor of Parent has committed any act, made any statement or failed to make any statement that violates the Federal Anti-Kickback Statute, 28 U.S.C. § 1320a-7b, the Federal False Claims Act, 31 U.S.C. § 3729, other Drug or Health Care Laws, or any other similar federal, state, or ex-U.S. law applicable in the jurisdictions in which the Parent Products are sold or intended to be sold.

(l) Neither Parent nor, to the knowledge of Parent, any officer, employee, agent, or distributor of Parent has been convicted of any crime or engaged in any conduct that has resulted, or would reasonably be expected to result, in debarment under applicable Law, including, without limitation, 21 U.S.C. § 335a, or exclusion under 42 U.S.C. § 1320a-7, or any other statutory provision or similar law applicable in other jurisdictions in which the Parent Products are sold or intended to be sold. Neither Parent nor, to the knowledge of Parent, any officer, employee, agent or distributor of Parent, has been excluded from participation in any federal health care program or convicted of any crime or engaged in any conduct for which such Person could be excluded from participating in any federal health care program under Section 1128 of the Social Security Act of 1935, as amended, or any similar Health Care Law or program.

Section 5.12 Benefit Plans.

(a) Section 5.12(a) of the Parent Disclosure Letter contains a true and complete list of each “employee benefit plan” (within the meaning of section 3(3) of ERISA, whether or not subject to ERISA), “multiemployer plans” (within the meaning of ERISA section 3(37)), and all stock purchase, stock option, phantom stock or other equity-based plan, severance, employment, collective bargaining, change-in-control, fringe benefit, bonus, incentive, deferred compensation, supplemental retirement, health, life, or disability insurance, dependent care and all other employee benefit and compensation plans, agreements, programs, policies or other arrangements, whether or not subject to ERISA (including any funding mechanism therefor now in effect or required in the future as a result of the transactions contemplated by this Agreement or otherwise), whether formal or informal, written or oral, legally binding or not, under which any current or former employee, director or consultant of Parent or its Subsidiaries (or any of their dependents) has any present or future right to compensation or benefits or Parent or any of its Subsidiaries sponsors or maintains, is making contributions to or has any present or future liability or obligation (contingent or otherwise) or with respect to which it is otherwise bound. All such plans, agreements, programs, policies and arrangements shall be collectively referred to as the “Parent Plans.” Parent has provided or made available to the Company a current, accurate and complete copy of each Parent Plan, or if such Parent Plan is not in written form, a written summary of all of the material terms of such Parent Plan. With respect to each Parent Plan, Parent has furnished or made available to the Company a current, accurate and complete copy of, to the extent applicable: (i) any related trust agreement or other funding instrument, (ii) the most recent determination letter of the IRS, (iii) any summary plan description, summary of material modifications, and other similar material written communications (or a written description of any material oral communications) to the employees of Parent or its Subsidiaries concerning the extent of the benefits provided under a Parent Plan, and (iv) for the three most recent years and as applicable (A) the Form 5500 and attached schedules, (B) audited financial statements and (C) actuarial valuation reports.

(b) Neither Parent, its Subsidiaries or any member of their Controlled Group (defined as any organization which is a member of a controlled, affiliated or otherwise related group of entities within the meaning of Code Section 414(b), (c), (m) or (o)) has ever sponsored, maintained, contributed to or been required to contribute to or incurred any liability (contingent or otherwise) with respect to: (i) a “multiemployer plan” (within the meaning of ERISA section 3(37)), (ii) a Pension Plan that is subject to Title IV of ERISA or Section 412 of the Code, (iii) a Pension Plan which is a “multiple employer plan” as defined in Section 413 of the Code, or (iv) a “funded welfare plan” within the meaning of Section 419 of the Code.

(c) With respect to the Parent Plans:

(i) each Parent Plan complies in all material respects with its terms and materially complies in form and in operation with the applicable provisions of ERISA and the Code and all other applicable legal requirements;

(ii) each Parent Plan intended to be qualified under Section 401(a) of the Code has received a favorable determination, advisory and/or opinion letter, as applicable, from the IRS that it is so qualified and nothing has occurred to the knowledge of the Parent since the date of such letter that would reasonably be expected to cause the loss of the sponsor’s ability to rely upon such letter, and nothing has occurred to the knowledge of the Parent that would reasonably be expected to result in the loss of the qualified status of such Parent Plan;

(iii) there is no material Action (including any investigation, audit or other administrative proceeding) by the Department of Labor, the PBGC, the IRS or any other Governmental Entity or by any plan participant or beneficiary pending, or to the knowledge of Parent, threatened, relating to the Parent Plans, any fiduciaries thereof with respect to their duties to Parent Plans or the assets of any of the trusts under any of Parent Plans (other than routine claims for benefits);

(iv) none of the Parent Plans currently provides, or reflects or represents any liability to provide post-termination or retiree welfare benefits to any person for any reason, except as may be required by COBRA, and none of Parent, its Subsidiaries or any members of their Controlled Group has any liability to provide post-termination or retiree welfare benefits to any person, except to the extent required by statute or except with respect to a contractual obligation to reimburse any premiums such person may pay in order to obtain health coverage under COBRA;

(v) each Parent Plan is subject exclusively to United States Law; and

(vi) the execution and delivery of this Agreement and the consummation of the Merger will not, either alone or in combination with any other event, (A) entitle any current or former employee, officer, director or consultant of Parent or any Subsidiary to severance pay, unemployment compensation or any other similar termination payment, or (B) accelerate the time of payment or vesting, or increase the amount of or otherwise enhance any benefit due to any such employee, officer, director or consultant.

(d) Neither Parent nor any Subsidiary is a party to any agreement, contract, arrangement or plan (including any Parent Plan) that may reasonably be expected to result, separately or in the aggregate, in connection with the transactions contemplated by this Agreement (either alone or in combination with any other events), in the payment of any "parachute payments" within the meaning of Section 280G of the Code. There is no agreement, plan or other arrangement to which any of Parent or any Subsidiary is a party or by which any of them is otherwise bound to compensate any person in respect of Taxes or other liabilities incurred with respect to Section 409A or 4999 of the Code.

Section 5.13 Labor and Employment Matters.

(a) Parent and its Subsidiaries are and since January 1, 2018 have been in compliance in all material respects with all applicable Laws relating to labor and employment, including those relating to employment practices, terms and conditions of employment, collective bargaining, disability, immigration, health and safety, wages, hours and benefits, non-discrimination in employment, workers' compensation, the collection and payment of withholding and/or payroll Taxes and similar Taxes, unemployment compensation, equal employment opportunity, discrimination, harassment, employee and contractor classification, information privacy and security, and continuation coverage with respect to group health plans. During the preceding three years, there has not been, and as of the date of this Agreement there is not pending or, to the knowledge of Parent, threatened, any labor dispute, work stoppage, labor strike or lockout against Parent or any of its Subsidiaries by employees.

(b) No employee of Parent or any of its Subsidiaries is covered by an effective or pending collective bargaining agreement or similar labor agreement. To the knowledge of Parent, there has not been any activity on behalf of any labor union, labor organization or similar employee group to organize any employees of Parent or any of its Subsidiaries. There are no (i) unfair labor practice charges or complaints against Parent or any of its Subsidiaries pending before the National Labor Relations Board or any other labor relations tribunal or authority and to the knowledge of Parent no such representations, claims or petitions are threatened, (ii) representation claims or petitions pending before the National Labor Relations Board or any other labor relations tribunal or authority or (iii) grievances or pending arbitration proceedings against Parent or any of its Subsidiaries that arose out of or under any collective bargaining agreement.

(c) To the knowledge of Parent, no current key employee or officer of Parent or any of its Subsidiaries intends, or is expected, to terminate his or her employment relationship with such entity in connection with or as a result of the transactions contemplated hereby.

(d) During the preceding three years, (i) neither Parent nor any Subsidiary has effectuated a “plant closing” (as defined in the WARN Act) affecting any site of employment or one or more facilities or operating units within any site of employment or facility, (ii) there has not occurred a “mass layoff” (as defined in the WARN Act) in connection with Parent or any Subsidiary affecting any site of employment or one or more facilities or operating units within any site of employment or facility and (iii) neither Parent nor any Subsidiary has engaged in layoffs or employment terminations sufficient in number to trigger application of any similar state, local or foreign law. The Parent and its Subsidiaries currently properly classify and for the past three (3) years have properly classified its and their employees as exempt or nonexempt in accordance with applicable overtime laws, and no person treated as an independent contractor or consultant by Parent or any Subsidiary within the past three (3) years should have been properly classified as an employee under applicable Law.

(e) With respect to any current or former employee, officer, consultant or other service provider of Parent, there are no Actions against Parent or any of its Subsidiaries pending, or to Parent’s knowledge, threatened to be brought or filed, in connection with the employment or engagement of any current or former employee, officer, consultant or other service provider of Parent, including, without limitation, any claim relating to employment discrimination, harassment, retaliation, equal pay, employment classification or any other employment related matter arising under applicable Laws, except where such action would not, individually or in the aggregate, result in Parent incurring a material liability.

(f) Except with respect to any Parent Plan (which subject is addressed in Section 5.12 above), the execution of this Agreement and the consummation of the transactions set forth in or contemplated by this Agreement will not result in any breach or violation of, or cause any payment to be made under, any applicable Laws respecting labor and employment or any collective bargaining agreement to which Parent or any of its Subsidiaries is a party.

(g) Since January 1, 2018, (i) no allegations of workplace sexual harassment, discrimination or other misconduct have been made, initiated, filed or, to the knowledge of Parent, threatened against Parent, any of its Subsidiaries or any of their respective current or former directors, officers or senior-level management employees, (ii) to the knowledge of Parent, no incidents of any such workplace sexual harassment, discrimination or other misconduct have occurred, and (iii) Parent has not entered into any settlement agreement related to allegations of sexual harassment, discrimination or other misconduct by any of its directors, officers or employees described in clause (i) hereof or any independent contractor.

(h) Parent and its Subsidiaries are and have at all relevant times been in compliance with (i) COVID-19 related Laws, standards, regulations, orders and guidance (including without limitation relating to business reopening), including those issued and enforced by the Occupational Safety and Health Administration, the Centers for Disease Control, the Equal Employment Opportunity Commission, and any other Governmental Entity; and (ii) the Families First Coronavirus Response Act and any other applicable COVID-19-related leave Law, whether state, local or otherwise.

Section 5.14 Environmental Matters.

(a) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect, (i) Parent and each of its Subsidiaries have conducted their respective businesses in compliance with all, and have not violated any, applicable Environmental Laws; (ii) Parent and its Subsidiaries have obtained all Permits of all Governmental Entities and any other Person that are required under any Environmental Law; (iii) there has been no release of any Hazardous Substance by Parent or any of its Subsidiaries or any other Person in any manner that has given or would reasonably be expected to give rise to any remedial or investigative obligation, corrective action requirement or liability of Parent or any of its Subsidiaries under applicable Environmental Laws; (iv) neither Parent nor any of its Subsidiaries has received any claims, notices, demand letters or requests for information (except for such claims, notices, demand letters or requests for information the subject matter of which has been resolved prior to the date of this Agreement) from any federal, state, local, foreign or provincial Governmental Entity or any other Person asserting that Parent or any of its Subsidiaries is in violation of, or liable under, any Environmental Law; (v) no Hazardous Substance has been disposed of, arranged to be disposed of, released or transported in violation of any applicable Environmental Law, or in a manner that has given rise to, or that would reasonably be expected to give rise to, any liability under any Environmental Law, in each case, on, at, under or from any current or former properties or facilities owned or operated by Parent or any of its Subsidiaries or as a result of any operations or activities of Parent or any of its Subsidiaries at any location and, to the knowledge of Parent, Hazardous Substances are not otherwise present at or about any such properties or facilities in amount or condition that has resulted in or would reasonably be expected to result in liability to Parent or any of its Subsidiaries under any Environmental Law; and (vi) neither Parent, its Subsidiaries nor any of their respective properties or facilities are subject to, or are threatened to become subject to, any liabilities relating to any suit, settlement, court order, administrative order, regulatory requirement, judgment or claim asserted or arising under any Environmental Law or any agreement relating to environmental liabilities.

Section 5.15 Taxes.

(a) Parent and each of its Subsidiaries have (i) filed all material Tax Returns required to be filed by or on behalf of themselves (taking into account any applicable extensions thereof) and all such Tax Returns are true, accurate and complete in all material respects; and (ii) paid in full (or caused to be timely paid in full) all material Taxes that are required to be paid by or with respect to it, whether or not such Taxes were shown as due on such Tax Returns.

(b) All material Taxes not yet due and payable by Parent or any of its Subsidiaries as of the date of the Parent Balance Sheet have been, in all respects, properly accrued in accordance with GAAP on the financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the Parent SEC Documents, and such financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the Parent SEC Documents reflect an adequate reserve (in accordance with GAAP) for all material Taxes accrued but unpaid by Parent and each of its Subsidiaries through the date of such financial statements. Since the date of the Parent Balance Sheet, neither Parent nor any of its Subsidiaries has incurred, individually or in the aggregate, any liability for Taxes outside the ordinary course of business consistent.

(c) Neither Parent nor any of its Subsidiaries has executed any waiver of any statute of limitations on, or extended the period for the assessment or collection of, any material amount of Tax, in each case that has not since expired.

(d) No material Tax Actions with respect to Taxes or any Tax Return of Parent or any of its Subsidiaries are presently in progress or have been asserted, threatened or proposed in writing. No deficiencies or claims for a material amount of Taxes have been claimed, proposed, assessed or asserted in writing against Parent or any of its Subsidiaries by a Governmental Entity, other than any such claim, proposal, assessment or assertion that has been satisfied by payment in full, settled or withdrawn.

(e) Subject to exceptions as would not be material, Parent and each of its Subsidiaries have timely withheld all Taxes required to have been withheld from payments made (or deemed made) to their employees, independent contractors, creditors, shareholders and other third parties and, to the extent required, such Taxes have been timely paid to the relevant Governmental Entity.

(f) Neither Parent nor any of its Subsidiaries has engaged in a “reportable transaction” as set forth in Treasury Regulations § 1.6011-4(b).

(g) Neither Parent nor any of its Subsidiaries (i) is a party to or bound by, or has any liability pursuant to, any Tax sharing, allocation, indemnification or similar agreement or obligation other than any Ordinary Course Agreement; (ii) is or has ever been a member of a group (other than a group the common parent of which is Parent) filing a consolidated, combined, affiliated, unitary or similar income Tax Return; (iii) has any liability for the Taxes of any Person (other than Parent) pursuant to Treasury Regulations § 1.1502-6 (or any similar provision of state, local or non-United States Law) as a transferee or successor, by Contract (other than Ordinary Course Agreements), or otherwise by operation of Law; and (iv) is or has ever been treated as a resident for any income Tax purpose, or as subject to Tax by virtue of having a permanent establishment, an office or fixed place of business, in any country other than the country in which it was or is organized.

(h) No private-letter rulings, technical advice memoranda, or similar material agreements or rulings have been requested in writing, entered into or issued by any taxing authority with respect to Parent or any of its Subsidiaries which rulings remain in effect.



(i) Neither Parent nor any of its Subsidiaries will be required to include any item of income in, or exclude any item of deduction from, taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of (i) a change in, or use of improper, method of accounting requested or initiated on or prior to the Closing Date, (ii) a “closing agreement” as described in Section 7121 of the Code (or any similar provision of Law) executed on or prior to the Closing Date, (iii) an installment sale or open-transaction disposition made on or prior to the Closing Date, (iv) any deferred intercompany gain or excess-loss account described in Treasury Regulations under Section 1502 of the Code (or any corresponding or similar provision of state, local or foreign income Tax Law), (v) an election under Section 965 of the Code, or (vi) the application of Section 951 or 951A of the Code with respect to income earned or recognized or payments received prior to the Closing.

(j) There are no liens for Taxes upon any of the assets of Parent or any of its Subsidiaries other than Liens described in clause (i) of the definition of Permitted Liens.

(k) Neither Parent nor any of its Subsidiaries has distributed stock of another Person or has had its stock distributed by another Person, in a transaction (or series of transactions) that was purported or intended to be governed in whole or in part by Section 355 or 361 of the Code.

(l) Neither Parent nor any of its Subsidiaries has been a United States real property holding corporation, as defined in Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code.

(m) No material claim has been made in writing by any Governmental Entity in a jurisdiction where Parent or any of its Subsidiaries does not currently file or has not filed a Tax Return that Parent or any of its Subsidiaries is or may be subject to taxation by such jurisdiction.

(n) Section 5.15(n) of the Parent Disclosure Letter sets forth the entity classification of Parent and each of its Subsidiaries for U.S. federal income tax purposes. Neither Parent nor any of its Subsidiaries has not made an election or taken any other action to change its federal and state income tax classification from such classification.

(o) Neither Parent nor any of its Subsidiaries has taken any action (or agreed to take any action) nor does it know of any fact or circumstance that could reasonably be expected to prevent or impede the Merger from qualifying as a transaction qualifying for the Intended Tax Treatment. For purposes of this Section 5.15, where the context permits, each reference to Parent or any of its Subsidiaries shall include a reference to any person for whose Taxes Parent or any of its Subsidiaries is liable under applicable Law.

For purposes of this Section 5.15, where the context permits, each reference to Parent or any of its Subsidiaries shall include a reference to any person for whose Taxes Parent or any of its Subsidiaries is liable under applicable Law.

#### Section 5.16 Contracts.

(a) Except as set forth in the Parent SEC Documents publicly available prior to the date of this Agreement, neither Parent nor any of its Subsidiaries is a party to or is bound by any “material contract” (as such term is defined in Item 601(b)(10) of Regulation S-K under the Securities Act, excluding, however, any Company Plans) (all such Contracts “Parent Material Contracts”).

(b) (i) Each Parent Material Contract is valid and binding on Parent and any of its Subsidiaries to the extent such Subsidiary is a party thereto, as applicable, and to the knowledge of Parent, each other party thereto, and is in full force and effect and enforceable in accordance with its terms; (ii) Parent and each of its Subsidiaries, and, to the knowledge of Parent, each other party thereto, have performed all material obligations required to be performed by themselves under each Parent Material Contract; and (iii) there is no material default under any Parent Material Contract by Parent or any of its Subsidiaries or, to the knowledge of Parent, any other party thereto, and no event or condition has occurred that constitutes, or, after notice or lapse of time or both, would constitute, a material default on the part of Parent or any of its Subsidiaries or, to the knowledge of Parent, any other party thereto under any such Parent Material Contract, nor has Parent or any of its Subsidiaries received any notice of any such material default, event or condition. Parent has made available to the Company true and complete copies of all Parent Material Contracts, including all amendments thereto.

Section 5.17 Insurance. Each of Parent and its Subsidiaries is covered by valid and currently effective insurance policies issued in favor of Parent or one or more of its Subsidiaries that are customary and adequate for companies of similar size in the industries and locations in which Parent operates. Section 5.17 of the Parent Disclosure Letter sets forth, as of the date hereof, a true and complete list of all material insurance policies issued in favor of Parent or any of its Subsidiaries, or pursuant to which Parent or any of its Subsidiaries is a named insured or otherwise a beneficiary, as well as any historic incurrence-based policies still in force. With respect to each such insurance policy, (a) such policy is in full force and effect and all premiums due thereon have been paid, (b) neither Parent nor any of its Subsidiaries is in breach or default, and has not taken any action or failed to take any action which (with or without notice or lapse of time, or both) would constitute such a breach or default, or would permit termination or modification of, any such policy and (c) to the knowledge of Parent, no insurer issuing any such policy has been declared insolvent or placed in receivership, conservatorship or liquidation. No notice of cancellation or termination has been received with respect to any such policy, nor will any such cancellation or termination result from the consummation of the transactions contemplated hereby. The transactions contemplated in this Agreement are not deemed to be a change of control under the Parent's existing directors' and officers' liability insurance policy.

Section 5.18 Properties.

(a) Parent or one of its Subsidiaries has good and valid title to, or in the case of leased property and leased tangible assets, a valid leasehold interest in, all of its real properties and tangible assets that are necessary for Parent and its Subsidiaries to conduct their respective businesses as currently conducted, free and clear of all Liens other than Permitted Liens. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Parent Material Adverse Effect, the tangible personal property currently used in the operation of the business of Parent and its Subsidiaries is in good working order (reasonable wear and tear excepted).

(b) Each of Parent and its Subsidiaries has complied with the terms of all leases to which it is a party, and all such leases are in full force and effect, except for any such noncompliance or failure to be in full force and effect that, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect. Each of Parent and its Subsidiaries enjoys peaceful and undisturbed possession under all such leases, except for any such failure to do so that, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect.

(c) Section 5.18(c) of the Parent Disclosure Letter sets forth a true and complete list of (i) all real property owned by Parent or any of its Subsidiaries and (ii) all real property leased for the benefit of Parent or any of its Subsidiaries.

(d) This Section 5.18 does not relate to intellectual property, which is the subject of Section 5.19.

Section 5.19 Intellectual Property.

(a) Section 5.19(a) of the Parent Disclosure Letter sets forth a true and complete list of all (i) material patents and patent applications; (ii) material trademark registrations and applications; and (iii) material copyright registrations and applications, in each case owned by the Parent and its Subsidiaries (collectively, "Parent Registered IP") and a true and complete list of all domain names owned or exclusively licensed by Parent and its Subsidiaries. Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect (A) all of the Parent Registered IP is subsisting and, in the case of any Parent Registered IP that is registered or issued and to the knowledge of Parent, valid and enforceable, (B) no Parent Registered IP is involved in any interference, reissue, derivation, reexamination, opposition, cancellation or similar proceeding and, to the knowledge of Parent, no such action is threatened with respect to any of the Parent Registered IP and (C) Parent or its Subsidiaries own exclusively, free and clear of any and all Liens (other than Permitted Liens), all Parent Owned IP, including all Intellectual Property created on behalf of Parent or its Subsidiaries by employees or independent contractors.

(b) Section 5.19(b) of the Parent Disclosure Letter accurately identifies (i) all contracts pursuant to which any Parent Registered IP is licensed to Parent or its Subsidiaries (other than (A) any non-customized software that (1) is so licensed solely in executable or object code form pursuant to a nonexclusive, internal-use software license and other Intellectual Property associated with such software and (2) is not incorporated into, or material to the development, manufacturing, or distribution of, any of Parent's or its Subsidiaries' products or services, (B) any Intellectual Property licensed on a nonexclusive basis ancillary to the purchase or use of equipment, reagents or other materials, (C) any confidential information provided under confidentiality agreements and (D) agreements between Parent and any of its Subsidiaries and their employees in Parent's standard form thereof), (ii) the corresponding Parent Contract pursuant to which such Parent Registered IP is licensed to Parent or any of its Subsidiaries and (iii) whether the license or licenses granted to Parent or its Subsidiaries are exclusive or nonexclusive.

(c) Section 5.19(c) of the Parent Disclosure Schedule accurately identifies each Parent contract pursuant to which any Person has been granted any license or covenant not to sue under, or otherwise has received or acquired any right (whether or not currently exercisable) or interest in, any Parent Registered IP (other than (i) any confidential information provided under confidentiality agreements and (ii) any Parent Registered IP nonexclusively licensed to academic collaborators, suppliers or service providers for the sole purpose of enabling such academic collaborator, supplier or service providers to provide services for Parent's benefit).

(d) Parent and its Subsidiaries have taken commercially reasonable measures to maintain the confidentiality of all information that constitutes or constituted a material Trade Secret of Parent or its Subsidiaries, including requiring all Persons having access thereto to execute written nondisclosure agreements or other binding obligations to maintain confidentiality of such information.

(e) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect, (i) to the knowledge of Parent, the conduct of the businesses of Parent and its Subsidiaries, including the manufacture, marketing, offering for sale, sale, importation, use or intended use or other disposal of any product as currently sold or under development by Parent or its Subsidiaries, has not infringed, misappropriated or diluted, and does not infringe, misappropriate or dilute, any Intellectual Property of any Person, (ii) neither Parent nor any of its Subsidiaries has received any written notice or claim asserting or suggesting that any such infringement, misappropriation, or dilution is or may be occurring or has or may have occurred and (iii) to the knowledge of Parent, no Person is infringing, misappropriating, or diluting in any material respect any Parent Registered IP.

(f) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect, (i) Parent and its Subsidiaries have taken commercially reasonable steps to protect the confidentiality and security of the computer and information technology systems used by Parent and its Subsidiaries (the "Parent IT Systems") and the information and transactions stored or contained therein or transmitted thereby, (ii) to the knowledge of Parent, during the past two (2) years, there has been no unauthorized or improper use, loss, access, transmittal, modification or corruption of any such information or data, and (iii) during the past two (2) years, there have been no material failures, crashes, viruses, or security breaches (including any unauthorized access to any personally identifiable information) affecting the Parent IT Systems.

(g) Except as, individually or in the aggregate, has not had and would not reasonably be expected to have a Parent Material Adverse Effect, (i) to the knowledge of Parent, Parent and its Subsidiaries have at all times complied in all material respects with all applicable Privacy Laws, (ii) during the past two (2) years, no claims have been asserted or, to the knowledge of Parent, threatened in writing against Parent alleging a violation of any Person's privacy or Personal Information, (iii) neither this Agreement nor the consummation of the transactions contemplated hereby will breach or otherwise violate any applicable Privacy Laws and (iv) Parent and its Subsidiaries have taken commercially reasonable steps to protect the Personal Information collected, used or held for use by Parent or its subsidiaries against loss and unauthorized access, use, modification, disclosure or other misuse.

(h) To the knowledge of Parent, no government funding, facilities or resources of a university, college, other educational institution or research center or funding from third parties was used in the development of the Parent Owned IP, to the knowledge of Parent, exclusively licensed to Parent, and no Governmental Entity, university, college, other educational institution or research center has, to the knowledge of Parent, any claim or right in or to such Intellectual Property.

(i) The execution, delivery and performance by Parent of this Agreement, and the consummation of the transactions contemplated hereby, will not result in the loss of, or give rise to any right of any third party to terminate or modify any of Parent's or any Subsidiaries' rights or obligations under any agreement under which Parent or any of its Subsidiaries grants to any Person, or any Person grants to Parent or any of its Subsidiaries, a license or right under or with respect to any Intellectual Property that is material to any of the businesses of Parent or any of its Subsidiaries.

Section 5.20 Related Party Transactions. Since January 1, 2018 through the date of this Agreement, there have been no transactions, agreements, arrangements or understandings between Parent or any of its Subsidiaries, on the one hand, and the Affiliates of Parent, on the other hand (other than Parent's Subsidiaries), that would be required to be disclosed under Item 404 of Regulation S-K under the Securities Act and that have not been so disclosed in the Parent SEC Documents.

Section 5.21 Certain Payments. Neither Parent nor any of its Subsidiaries (nor, to the knowledge of the Company, any of their respective directors, executives, representatives, agents or employees) (a) has used or is using any corporate funds for any illegal contributions, gifts, entertainment or other unlawful expenses relating to political activity, (b) has used or is using any corporate funds for any direct or indirect unlawful payments to any foreign or domestic governmental officials or employees, (c) has violated or is violating any provision of the Foreign Corrupt Practices Act of 1977, (d) has established or maintained, or is maintaining, any unlawful fund of corporate monies or other properties or (e) has made any bribe, unlawful rebate, payoff, influence payment, kickback or other unlawful payment of any nature.

Section 5.22 Brokers. No broker, investment banker, financial advisor or other Person, other than Ladenburg Thalmann & Co., the fees and expenses of which will be paid by Parent, is entitled to any broker's, finder's, financial advisor's or other similar fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of Parent. Parent has furnished to Company a true and complete copy of any Contract between the Parent and Ladenburg Thalmann & Co. pursuant to which Ladenburg Thalmann & Co. could be entitled to any payment from the Parent relating to the transactions contemplated hereby.

Section 5.23 Opinion of Financial Advisor. Parent Board has received the opinion of Ladenburg Thalmann & Co., dated the date of this Agreement, to the effect that, as of such date and based upon and subject to the qualifications, limitations, assumptions and other matters set forth therein, the First Merger Consideration (which as used in such opinion means the aggregate number of shares of Parent Capital Stock issuable in the Merger to holders of shares of Company Common Stock upon the conversion of shares of Company Common Stock) is fair, from a financial point of view, to Parent, a signed true and complete copy of which opinion has been or will promptly be provided to the Company.

Section 5.24 Merger Subs. First Merger Sub was formed solely for the purpose of engaging in the First Merger and the other transactions contemplated hereby and has engaged in no business other than in connection with the transactions contemplated by this Agreement. Second Merger Sub was formed solely for the purpose of engaging in the Second Merger and the other transactions contemplated hereby and has engaged in no business other than in connection with the transactions contemplated by this Agreement.

Section 5.25 State Takeover Statutes. No Takeover Laws or any similar anti-takeover provision in the Certificate of Incorporation or Bylaws of Parent applicable to Parent is, or at the First Effective Time will be, applicable to this Agreement, the Merger, the Parent Capital Stock Issuance, or any of the other transactions contemplated hereby.

Section 5.26 No Other Representations or Warranties. Except for the representations and warranties contained in Article IV, each of Parent, First Merger Sub and Second Merger Sub acknowledges and agrees that none of the Company or any other Person on behalf of the Company makes any other express or implied representation or warranty whatsoever, and specifically (but without limiting the generality of the foregoing) that none of the Company or any other Person on behalf of the Company or any of its Subsidiaries makes any representation or warranty with respect to any projections or forecasts delivered or made available to Parent, First Merger Sub, Second Merger Sub or any of their respective Subsidiaries or Representatives of future revenues, results of operations (or any component thereof), cash flows or financial condition (or any component thereof) of the Company (including any such projections or forecasts made available to Parent, First Merger Sub, Second Merger Sub or any of their respective Subsidiaries or Representatives in certain “data rooms” or management presentations in expectation of the transactions contemplated by this Agreement), and none of Parent, First Merger Sub or Second Merger Sub has relied on any such information or any representation or warranty not set forth in Article IV.

## ARTICLE VI COVENANTS

### Section 6.1 Proxy Statement

(a) As promptly as practicable after the Closing Date, Parent shall prepare and file with the SEC a proxy statement relating to the Parent Stockholders Meeting to be held in connection with the Conversion Proposal and Charter Amendment Proposal (together with any amendments thereof or supplements thereto, the “Proxy Statement”). Parent shall use its reasonable best efforts to (i) cause the Proxy Statement to comply with the applicable rules and regulations promulgated by the SEC and (ii) respond promptly to any comments or requests of the SEC or its staff relating to the Proxy Statement.

(b) Parent covenants and agrees that the Proxy Statement (and the letter to stockholders, notice of meeting and form of proxy included therewith) will (i) comply as to form in all material respects with the requirements of applicable U.S. federal securities laws and the DGCL, and (ii) not 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.

(c) Parent shall use commercially reasonable efforts to cause the Proxy Statement to be mailed to Parent's stockholders as promptly as practicable after the Proxy Statement has been filed with the SEC and either (i) the SEC has indicated that it does not intend to review the Proxy Statement or that its review of the Proxy Statement has been completed or (ii) at least ten (10) days shall have passed since the Proxy Statement was filed with the SEC without receiving any correspondence from the SEC commenting upon, or indicating that it intends to review, the Proxy Statement, all in compliance with applicable U.S. federal securities laws and the DGCL. If Parent, the First Step Surviving Company or the Surviving Company becomes aware of any event or information that, pursuant to the Securities Act or the Exchange Act, should be disclosed in an amendment or supplement to the Proxy Statement, as the case may be, then such party, as the case may be, shall promptly inform the other parties thereof and shall cooperate with such other parties in Parent filing such amendment or supplement with the SEC and, if appropriate, in mailing such amendment or supplement to the Parent stockholders.

#### Section 6.2 Stockholders' Meeting.

(a) Parent shall take all action necessary under applicable Law to call, give notice of and hold a meeting of the holders of Parent Common Stock to consider and vote to approve (1) the conversion of the Parent Convertible Preferred Stock issued pursuant to this Agreement and the Stock Purchase Agreement into shares of Parent Common Stock in accordance with Nasdaq Listing Rule 5635(a) (the "Conversion Proposal") and (2) if deemed necessary or appropriate by Parent or as otherwise required by applicable Law or Contract, to authorize sufficient Parent Common Stock in Parent's certificate of incorporation for the conversion of the Parent Convertible Preferred Stock issued pursuant to this Agreement and the Stock Purchase Agreement and/or to effectuate a reverse stock split (collectively, the "Charter Amendment Proposal") pursuant to the terms of this Agreement (collectively, the "Parent Stockholder Matters") and such meeting, the "Parent Stockholder Meeting"). The Parent Stockholder Meeting shall be held as promptly as practicable after the date that the definitive Proxy Statement is filed with the SEC, and in any event no later than forty-five (45) days after such date. Parent shall take reasonable measures to ensure that all proxies solicited in connection with the Parent Stockholder Meeting are solicited in compliance with all applicable Law. Notwithstanding anything to the contrary contained herein, if on the date of the Parent Stockholder Meeting, or a date preceding the date on which the Parent Stockholder Meeting is scheduled, Parent reasonably believes that (i) it will not receive proxies sufficient to obtain the Parent Stockholder Approval, whether or not a quorum would be present or (ii) it will not have sufficient shares of Parent Common Stock represented (whether in person or by proxy) to constitute a quorum necessary to conduct the business of the Parent Stockholder Meeting, Parent may postpone or adjourn, or make one or more successive postponements or adjournments of, the Parent Stockholder Meeting as long as the date of the Parent Stockholder Meeting is not postponed or adjourned more than an aggregate of thirty (30) days in connection with any postponements or adjournments.

(b) Parent agrees that, subject to the Parent Board's compliance with its fiduciary duties under applicable Law, (i) the Parent Board shall recommend that the holders of Parent Common Stock vote to approve the Parent Stockholder Matters and shall use commercially reasonable efforts to solicit such approval within the time frame set forth in Section 6.2(a) above and (ii) the Proxy Statement shall include a statement to the effect that the Parent Board recommends that Parent's stockholders vote to approve the Parent Stockholder Matters.

Section 6.3 Indemnification, Exculpation and Insurance.

(a) From the First Effective Time through the sixth anniversary of the date on which the First Effective Time occurs, each of Parent and the Surviving Company shall indemnify and hold harmless each person who is now, or has been at any time prior to the date hereof, or who becomes prior to the First Effective Time, a director or officer of Parent or the Company, respectively (the "D&O Indemnified Parties"), against all claims, losses, liabilities, damages, judgments, fines and reasonable fees, costs and expenses, including attorneys' fees and disbursements, incurred in connection with any claim, action, suit, proceeding or investigation, whether civil, criminal, administrative or investigative, arising out of or pertaining to the fact that the D&O Indemnified Party is or was a director or officer of Parent or of the Company, whether asserted or claimed prior to, at or after the First Effective Time, in each case, to the fullest extent permitted under the DGCL and the DLLCA. Each D&O Indemnified Party will be entitled to advancement of expenses incurred in the defense of any such claim, action, suit, proceeding or investigation from each of Parent and the Surviving Company, jointly and severally, upon receipt by Parent or the Surviving Company from the D&O Indemnified Party of a request therefor; provided that any such person to whom expenses are advanced provides an undertaking to Parent, to the extent then required by the DGCL and the DLLCA, to repay such advances if it is ultimately determined that such person is not entitled to indemnification.

(b) The provisions of the certificate of incorporation and bylaws of Parent with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers of Parent that are presently set forth in the certificate of incorporation and bylaws of Parent shall not be amended, modified or repealed for a period of six years from the First Effective Time in a manner that would adversely affect the rights thereunder of individuals who, at or prior to the First Effective Time, were officers or directors of Parent, unless such modification is required by applicable Law. The certificate of formation and limited liability company agreement of the Surviving Company shall contain, and Parent shall cause the certificate of formation and limited liability company agreement of the Surviving Company to so contain, provisions no less favorable with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers as those presently set forth in the certificate of incorporation and bylaws of Parent.



(c) From and after the First Effective Time through the sixth anniversary of the date on which the First Effective Time occurs, (i) the Surviving Company shall fulfill and honor in all respects the obligations of the Company to its D&O Indemnified Parties as of immediately prior to the Closing pursuant to any indemnification provisions under the Company's Organizational Documents and pursuant to any indemnification agreements between the Company and such D&O Indemnified Parties, with respect to claims arising out of matters occurring at or prior to the First Effective Time and (ii) Parent shall fulfill and honor in all respects the obligations of Parent to its D&O Indemnified Parties as of immediately prior to the Closing pursuant to any indemnification provisions under Parent's Organizational Documents and pursuant to any indemnification agreements between Parent and such D&O Indemnified Parties, with respect to claims arising out of matters occurring at or prior to the First Effective Time.

(d) From and after the First Effective Time through the sixth anniversary of the date on which the First Effective Time occurs, Parent shall maintain directors' and officers' liability insurance policies, with an effective date as of the Closing Date, on commercially available terms and conditions and with coverage limits customary for U.S. public companies similarly situated to Parent.

(e) From and after the First Effective Time through the sixth anniversary of the date on which the First Effective Time occurs, Parent shall pay all expenses, including reasonable attorneys' fees, that are incurred by the persons referred to in this Section 6.3 in connection with their enforcement of the rights provided to such persons in this Section 6.3.

(f) The provisions of this Section 6.3 are intended to be in addition to the rights otherwise available to the current and former officers and directors of Parent and the Company by Law, charter, statute, bylaw or agreement, and shall operate for the benefit of, and shall be enforceable by, each of the D&O Indemnified Parties, their heirs and their Representatives.

(g) In the event Parent or the Surviving Company or any of their respective successors or assigns (i) 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 (ii) transfers all or substantially all of its properties and assets to any Person, then, and in each such case, proper provision shall be made so that the successors and assigns of Parent or the Surviving Company, as the case may be, shall succeed to the obligations set forth in this Section 6.3. Parent shall cause the Surviving Company to perform all of the obligations of the Surviving Company under this Section 6.3.

Section 6.4 Section 16 Matters. Prior to the First Effective Time, each of Parent and the Company shall take all such steps as may be necessary or appropriate to cause the acquisitions of Parent Common Stock (including derivative securities with respect to such Parent Common Stock) resulting from the transactions contemplated by this Agreement by each individual who will become subject to such reporting requirements with respect to Parent to be exempt under Rule 16b-3 promulgated under the Exchange Act.

Section 6.5 Employee Matters. At the First Effective Time, Parent shall assume the employment agreements for each of the employees of the Company set forth on Section 6.5 of the Company Disclosure Letter and the Company shall cause each such employee to waive any change of control or severance benefits that would otherwise arise by virtue of the consummation of the Merger (alone or in combination with any other event).

Section 6.6 Tax Matters.

(a) Each of Parent and the Company will (and will cause its Affiliates to) (i) use all reasonable best efforts to cause the Merger to constitute as a transaction qualifying for the Intended Tax Treatment and (ii) not take any action or fail to take any action required hereby that could reasonably be expected to prevent or impede the Merger from qualifying as a transaction qualifying for the Intended Tax Treatment. Parent shall not file (or cause its Affiliates, including the Company, to file) any U.S. federal, state or local Tax Return after the Closing Date in a manner that is inconsistent with the treatment of the Merger as a transaction qualifying for the Intended Tax Treatment for U.S. federal, state income and other relevant Tax purposes, and shall not take any inconsistent position during the course of any audit, litigation or other proceeding with respect to Taxes, in each case, unless otherwise required by a determination within the meaning of Section 1313(a) of the Code.

(b) All transfer, documentary, sales, use, stamp, registration, excise, recording, registration value-added and other such similar Taxes and fees (including any penalties and interest) that become payable in connection with or by reason of the execution of this Agreement and the transactions contemplated hereby shall be borne and paid by Parent. Unless otherwise required by applicable law, Parent shall timely file any Tax Return or other document with respect to such Taxes or fees (and the Company shall reasonably cooperate with respect thereto as necessary).

(c) On the Closing Date, the Company shall provide Parent with a certificate on behalf of the Company, prepared in a manner consistent and in accordance with the requirements of Treasury Regulations § 1.897-2(g), (h) and § 1.1445-2(c)(3), certifying that no interest in the Company is a “U.S. real property interest” within the meaning of Section 897(c) of the Code, and a form of notice to the Internal Revenue Service prepared in accordance with the provisions of Treasury Regulations § 1.897-2(h)(2); provided, that the Parent’s sole remedy for the Company’s failure to deliver such documentation shall be to withhold pursuant to Section 3.4.

Section 6.7 Private Placement. The Company shall use commercially reasonable efforts to take such actions and cause the holders of Company Common Stock, Company Preferred Stock and Company Warrants to provide all documentation, including investor questionnaires, reasonably requested by Parent to allow Parent to issue the Parent Capital Stock to such holders in a manner that satisfies the requirements of Rule 506 of Regulation D under the Securities Act or Rule 902 of Regulation S, including certifications to Parent: that either (a) (i) such holder is and will be, as of the First Effective Time, an “accredited investor” (as such term is defined in Rule 501 of Regulation D under the Securities Act) and as to the basis on which such holder is an accredited investor; or (ii) such holder is not and will not be, as of the First Effective Time, an “accredited investor,” in which case such holder either alone or with such holder’s purchaser representative has such knowledge and experience in financial and business matters that such holder is capable of evaluating the merits and risks of the Parent Capital Stock; and (iii) that the Parent Capital Stock is being acquired for such holder’s account for investment only and not with a view towards, or with any intention of, a distribution or resale thereof for at least a period of six (6) months following the Closing or (b) such holder is not a “U.S. person” within the meaning of Regulation S, Rule 902, promulgated by the SEC under the Securities Act.

Section 6.8 Obligations of Merger Subs. Parent will take all action necessary to cause Merger Subs to perform their obligations under this Agreement and to consummate the Merger on the terms and conditions set forth in this Agreement.

**ARTICLE VII**  
**CONDITIONS PRECEDENT**

Section 7.1 Conditions to Each Party's Obligation to Effect the Merger. The obligation of each party to effect the Merger and otherwise consummate the transactions contemplated by this Agreement at the Closing is subject to the satisfaction at or prior to the First Effective Time of the following conditions:

(a) Company Stockholder Approval. The Company shall have obtained the Company Stockholder Approval.

(b) No Injunctions or Legal Restraints; Illegality. No temporary restraining order, preliminary or permanent injunction or other judgment, order or decree issued by any court of competent jurisdiction or other legal restraint or prohibition shall be in effect, and no Law shall have been enacted, entered, promulgated, enforced or deemed applicable by any Governmental Entity that, in any such case, prohibits or makes illegal the consummation of the Merger and the transactions contemplated by this Agreement.

(c) Nasdaq Listing. The shares of Parent Common Stock issuable to the stockholders of the Company and to holders of Company Options as provided for in Article III shall have been approved for listing on the Nasdaq, subject to official notice of issuance.

(d) Concurrent Investment. The Stock Purchase Agreement shall be in full force and effect and the Concurrent Investment shall have resulted in gross proceeds to Parent of not less than \$110,000,000, which gross proceeds shall have been received by or will be received by Parent substantially simultaneously with the Closing.

Section 7.2 Closing Deliveries of the Company. The obligations of Parent and Merger Subs to effect the Merger and otherwise consummate the transactions to be consummated at the Closing are subject to Parent receiving the following documents, each of which shall be in full force and effect, or the written waiver by Parent of delivery:

(a) the Company Stockholder Approval executed by the stockholders of the Company shall be in full force and effect;

(b) a written resignation, in a form reasonably satisfactory to Parent, dated as of the Closing Date and effective as of the Closing, executed by each of the directors and officers of the Company;

(c) the Company Lock-Up Agreements;

(d) evidence reasonably satisfactory to Parent that the agreements listed in Section 7.2(d) of the Company Disclosure Letter have been terminated without continuing liability or obligation to Parent, any of its Subsidiaries or the Company;

(e) evidence reasonably satisfactory to Parent that the agreements listed in Section 7.2(e) of the Company Disclosure Letter have been amended on terms reasonably satisfactory to Parent; and

(f) stock certificates, to the extent not represented by book-entry, representing each share of Company Common Stock and Company Preferred Stock that is issued and outstanding as of immediately prior to the First Effective Time, together with letters of transmittal (in customary form) duly executed by each holder thereof.

Section 7.3 Closing Deliveries of Parent. The obligations of the Company to effect the Merger and otherwise consummate the transactions to be consummated at the Closing are subject to the Company receiving the following documents, each of which shall be in full force and effect, or the written waiver by the Company of delivery:

(a) a copy of the Certificate of Designation, certified by the Secretary of State of the State of Delaware;

(b) a written resignation, in a form reasonably satisfactory to the Company, dated as of the Closing Date and effective as of the Closing, executed by each of the officers and directors of Parent who is not to continue as an officer or director, as the case may be, of Parent after the Closing pursuant to Section 1.1 hereof;

(c) the Parent Support Agreements;

(d) the Parent Lock-Up Agreements;

(e) a schedule setting forth, in reasonable detail, Parent's good faith, estimated calculation of Net Cash, including each component thereof prepared and certified by Parent's principal financial or accounting officer, together with the work papers and backup materials used or useful in preparing such schedule, as requested by the Company; and

(f) evidence of the issuance, to each holder of Company Common Stock immediately prior to the First Effective Time (other than any holders to the extent it holds Excluded Shares or Dissenting Shares) of such holders' portion of the First Merger Consideration in the name of by book entry on the stock ledger of Parent (or, if such portion of the First Merger Consideration is to be represented in certificated form, a certificate representing the First Merger Consideration in the name of such holder).

## **ARTICLE VIII GENERAL PROVISIONS**

Section 8.1 Non-survival of Representations and Warranties. None of the representations, warranties, covenants or agreements in this Agreement or in any instrument delivered pursuant to this Agreement shall survive the First Effective Time, other than those covenants or agreements of the parties which by their terms apply, or are to be performed in whole or in part, after the First Effective Time.

Section 8.2 Amendment or Supplement. This Agreement may be amended, modified or supplemented by the parties by action taken or authorized by their respective Boards of Directors at any time, whether before or after Company Stockholder Approval or the Parent Stockholder Approval has been obtained; provided, however, that after the Company Stockholder Approval or the Parent Stockholder Approval has been obtained, no amendment shall be made that pursuant to applicable Law requires further approval or adoption by the stockholders of the Company or Parent, as applicable, without such further approval or adoption. This Agreement may not be amended, modified or supplemented in any manner, whether by course of conduct or otherwise, except by an instrument in writing specifically designated as an amendment hereto, signed on behalf of each of the parties in interest at the time of the amendment.

Section 8.3 Waiver. The parties may, by action taken or authorized by their respective Boards of Directors, to the extent permitted by applicable Law, waive compliance with any of the agreements or conditions of the other parties contained herein; provided, however, that after the Company Stockholder Approval or the Parent Stockholder Approval has been obtained, no waiver may be made that pursuant to applicable Law requires further approval or adoption by the stockholders of the Company or Parent, as applicable, without such further approval or adoption. Any agreement on the part of a party to any such waiver shall be valid only if set forth in a written instrument executed and delivered by a duly authorized officer on behalf of such party. No failure or delay of any party in exercising any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such right or power, or any course of conduct, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the parties hereunder are cumulative and are not exclusive of any rights or remedies which they would otherwise have hereunder.

Section 8.4 Fees and Expenses. Except as otherwise set forth in this Agreement, all fees and expenses incurred in connection with this Agreement, the Merger and the other transactions contemplated hereby shall be paid by the party incurring such fees or expenses.

Section 8.5 Notices. All notices and other communications hereunder shall be in writing and shall be deemed duly given (a) on the date of delivery if delivered personally, or if by e-mail, upon written confirmation of receipt by e-mail or otherwise, (b) on the first Business Day following the date of dispatch if delivered utilizing a next-day service by a recognized next-day courier or (c) on the earlier of confirmed receipt or the fifth Business Day following the date of mailing if delivered by registered or certified mail, return receipt requested, postage prepaid. All notices hereunder shall be delivered to the addresses set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

- (i) if to Parent, Merger Subs or the Surviving Company, to:

Catabasis Pharmaceuticals, Inc.  
100 High Street  
Floor 28  
Boston, Massachusetts 02110  
Attention:

General Counsel  
bharshbarger@catabasis.com

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

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, Massachusetts 02109  
Attention:

Rosemary G. Reilly, Esq.  
Joseph B. Conahan, Esq.  
rosemary.reilly@wilmerhale.com  
joseph.conahan@wilmerhale.com

(ii) if to Company, to:

Quellis Biosciences, Inc.  
203 Crescent Street, Bldg. #17, Suite #102B  
Waltham, MA 02453

Attention: Jonathan Violin  
E-mail: jviolin@quellisbio.com

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

Gibson, Dunn & Crutcher LLP  
555 Mission St., Suite 3000  
San Francisco, CA 94105

Attention: Ryan Murr, Esq.  
Chris Trester, Esq.  
E-mail: rmurr@gibsondunn.com  
ctrester@gibsondunn.com

Section 8.6 Certain Definitions. For purposes of this Agreement:

(a) “Affiliate” of any Person means any other Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such first Person.

(b) “Business Day” means any day other than a Saturday, a Sunday or a day on which banks in New York, New York are authorized or required by applicable Law to be closed.

- (c) “Cash and Cash Equivalents” means all (i) cash and cash equivalents and (ii) marketable securities, in each case determined in accordance with GAAP.
- (d) “Certificate of Designation” means a certificate of designation for the Parent Convertible Preferred Stock in the form attached hereto as Exhibit E.
- (e) “Company Owned IP” means all Intellectual Property owned by the Company or any of its Subsidiaries in whole or in part.
- (f) “control” (including the terms “controlled,” “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.
- (g) “Intellectual Property” means all intellectual property rights of any kind or nature in any jurisdiction throughout the world, including all of the following to the extent protected by applicable law: (i) trademarks or service marks (whether registered or unregistered), trade names, domain names, social media user names, social media addresses, logos, slogans, and trade dress, including applications to register any of the foregoing, together with the goodwill symbolized by any of the foregoing; (ii) patents, utility models and any similar or equivalent statutory rights with respect to the protection of inventions, and all applications for any of the foregoing, together with all re-issuances, continuations, continuations-in-part, divisionals, revisions, extensions and reexaminations thereof; (iii) copyrights (registered and unregistered) and applications for registration; (iv) trade secrets and customer lists, in each case to the extent any of the foregoing derive economic value (actual or potential) from not being generally known to other Persons who can obtain economic value from their disclosure or use, and other confidential information (“Trade Secrets”); and (v) any other proprietary or intellectual property rights of any kind or nature.
- (h) “knowledge” of any party means (i) the actual knowledge of any executive officer of such party or other officer having primary responsibility for the relevant matter or (ii) any fact or matter which any such officer of such party could be expected to discover or otherwise become aware of in the course of conducting a reasonably comprehensive investigation, consistent with such officer’s title and responsibilities, concerning the existence of the relevant matter.
- (i) “Nasdaq” means the Nasdaq Stock Market, LLC.
- (j) “Net Cash” means the amount, whether positive or negative, without duplication, as of immediately prior to the First Effective Time: (i) Parent’s Cash and Cash Equivalents determined, to the extent in accordance with GAAP, in a manner consistent with the manner in which such items were historically determined and in accordance with the financial statements (including any related notes) contained or incorporated by reference in the Parent SEC Documents and the Parent Balance Sheet, minus (ii) the sum of (x) Parent’s consolidated short-term and long-term liabilities accrued at Closing, and (y) to the extent payable in cash at Closing, any and all liabilities of Parent (I) to any current or former Parent’s or any of its Subsidiaries’ officer, director, employee, consultant or independent contractor (including change-of-control payments, retention payments, severance and other employee-, consultant- or independent contractor-related termination costs, or other payments), or (II) pursuant to any Parent Plan, including deferred compensation accrued but unpaid bonuses and accrued but unpaid vacation or paid time off (including related employer employment taxes on all the foregoing), plus (iii) all prepaid expenses at Closing, minus (iv) the cash costs of warrant payouts (including Black-Scholes warrant payouts, if applicable) required to be paid by a party in connection with or triggered by, the Closing or the transactions contemplated hereby, minus (v) the sum of estimated cash costs associated with the termination of ongoing contractual obligations relating to Parent’s legacy business operations (e.g., CRO fees, consulting fees with termination provisions, manufacturing obligations, etc.), minus (vi) unpaid fees and expenses of Parent and its Subsidiaries incurred in connection with the contemplated transactions hereunder, including for the avoidance of doubt, Transaction Expenses to the extent unpaid as of the Closing, minus (vii) any unpaid Taxes of Parent and its Subsidiaries for Tax periods (or portions thereof) ending on or before the Closing Date determined in a manner consistent with past practice (to the extent such past practice is consistent with applicable Law), minus (viii) unpaid “applicable employment taxes” (as defined in Section 2302(d)(i) of the CARES Act) that the Parent or any of its Subsidiaries has deferred as of the Closing Date.

- (k) “Parent Balance Sheet” means the audited balance sheet of Parent as of December 31, 2019, included in Parent’s Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC.
- (l) “Parent Capital Stock” means the Parent Common Stock and Parent Convertible Preferred Stock.
- (m) “Parent Closing Price” means the closing price of one (1) share of Parent Common Stock on Nasdaq on the trading day immediately preceding the Closing Date
- (n) “Parent Owned IP” means all Intellectual Property owned by Parent or any of its Subsidiaries in whole or in part.
- (o) “Person” means an individual, corporation, partnership, limited liability company, association, trust or other entity or organization, including any Governmental Entity.
- (p) “Personal Information” means any information that alone or in combination with other information can be used to identify an individual.
- (q) “Representative” means, with respect to a party, such party’s directors, officers, employees, investment bankers, financial advisors, attorneys, accountants or other advisors, agents or representatives.
- (r) “SEC” means the Securities and Exchange Commission.
- (s) “Subsidiary” means, with respect to any Person, any other Person of which stock or other equity interests having ordinary voting power to elect more than 50% of the board of directors or other governing body are owned, directly or indirectly, by such first Person.
- (t) “Tax Return” means any return, declaration, report, election, claim for refund, information return, or statement filed or supplied or required to be filed or supplied to any Governmental Entity or any other Person with respect to Taxes, including any schedule, attachment or supplement thereto, and including any amendment thereof.



(u) “Taxes” means (i) all federal, state, local, foreign and other net income, gross income, gross receipts, sales, use, stock, ad valorem, transfer, transaction, franchise, profits, gains, registration, license, wages, lease, service, service use, employee and other withholding, social security, unemployment, welfare, disability, payroll, employment, excise, severance, stamp, occupation, workers’ compensation, premium, real property, personal property, escheat or unclaimed property, windfall profits, net worth, capital, value-added, alternative or add-on minimum, customs duties, estimated and other taxes, fees, assessments, charges or levies of any kind whatsoever (whether imposed directly or through withholding and including taxes of any third party in respect of which a Person may have a duty to collect or withhold and remit and any amounts resulting from the failure to file any Tax Return), whether disputed or not, together with any interest and any penalties, additions to tax or additional amounts with respect thereto and (ii) any liability for payment of amounts described in clause (i) whether as a result of transferee or successor liability, of being a member of an affiliated, consolidated, combined or unitary group for any period, pursuant to a Contract, through operation of Law or otherwise.

(v) “Transaction Expenses” means the aggregate amount (without duplication) of all costs, fees and expenses incurred by Parent or any of its Subsidiaries (including Merger Subs), or for which Parent or any of its Subsidiaries are or may become liable in connection with the transactions contemplated hereby and the negotiation, preparation and execution of this Agreement or any other agreement, document, instrument, filing, certificate, schedule, exhibit, letter or other document prepared or executed in connection with the transactions contemplated hereby, including (a) any fees and expenses of legal counsel and accountants, the maximum amount of fees and expenses payable to financial advisors, investment bankers, brokers, consultants, tax advisors, transfer agents, proxy solicitor and other advisors of Parent and (b) any bonus, retention payments, severance, change-in-control payments or similar payment obligations (including payments with “single-trigger” provisions triggered at and as of the consummation of the transactions contemplated hereby) that become due or payable to any director, officer, employee or consultant in connection with the consummation of the transactions contemplated hereby, together with any payroll Taxes associated therewith.

Section 8.7 Interpretation. When a reference is made in this Agreement to a Section, Article, Exhibit or Schedule such reference shall be to a Section, Article, Exhibit or Schedule of this Agreement unless otherwise indicated. The table of contents and headings contained in this Agreement or in any Exhibit or Schedule are for convenience of reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. All words used in this Agreement will be construed to be of such gender or number as the circumstances require. Any capitalized terms used in any Exhibit or Schedule but not otherwise defined therein shall have the meaning as defined in this Agreement. All Exhibits and Schedules annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth herein. The word “including” and words of similar import when used in this Agreement will mean “including, without limitation,” unless otherwise specified. The words “hereof,” “herein” and “hereunder” and words of similar import when used in this Agreement shall refer to the Agreement as a whole and not to any particular provision in this Agreement. The term “or” is not exclusive. The word “will” shall be construed to have the same meaning and effect as the word “shall.” References to days mean calendar days unless otherwise specified. Each of the terms “delivered” and “made available” means, with respect to any documentation, that (i) prior to 11:59 p.m. (Pacific Time) on the date that is two Business Days prior to the date of this Agreement (A) a copy of such material has been posted to and made available by a party to the other party and its Representatives in the electronic data room maintained by such disclosing party or (B) such material is disclosed in the Parent SEC Documents filed with the SEC prior to the date hereof and publicly made available on the SEC’s Electronic Data Gathering Analysis and Retrieval system or (ii) such documentation has been delivered by or on behalf of a party or its Representatives via electronic mail or in hard copy form prior to the execution of this Agreement. Whenever the last day for the exercise of any privilege or the discharge of any duty hereunder shall fall upon a Saturday, Sunday, or any date on which banks in New York, New York, are authorized or obligated by law to be closed, the party having such privilege or duty may exercise such privilege or discharge such duty on the next succeeding day which is a regular Business Day.

Section 8.8 Entire Agreement. This Agreement (including the Exhibits hereto), the Company Disclosure Letter, the Parent Disclosure Letter and the Confidentiality Agreement constitute the entire agreement, and supersede all prior written agreements, arrangements, communications and understandings and all prior and contemporaneous oral agreements, arrangements, communications and understandings among the parties with respect to the subject matter hereof and thereof.

Section 8.9 No Third-Party Beneficiaries.

(a) Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person other than the parties and their respective successors and permitted assigns any legal or equitable right, benefit or remedy of any nature under or by reason of this Agreement, except as provided in Section 3.2(a) and Section 6.3.

(b) The representations and warranties in this Agreement are the product of negotiations among the parties hereto and are for the sole benefit of the parties hereto. Any inaccuracies in such representations and warranties are subject to waiver by the parties hereto in accordance with Section 8.3 without notice or liability to any other Person. In some instances, the representations and warranties in this Agreement may represent an allocation among the parties hereto of risks associated with particular matters regardless of the knowledge of any of the parties hereto. Consequently, Persons other than the parties hereto may not rely upon the representations and warranties in this Agreement as characterizations of actual facts or circumstances as of the date of this Agreement or as of any other date.

Section 8.10 Governing Law. This Agreement and all disputes or controversies arising out of or relating to this Agreement or the transactions contemplated hereby shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to the laws of any other jurisdiction that might be applied because of the conflicts-of-laws principles of the State of Delaware.

Section 8.11 Submission to Jurisdiction. Each of the parties irrevocably agrees that any legal action or proceeding arising out of or relating to this Agreement brought by any party or its Affiliates against any other party or its Affiliates shall be brought and determined in the Court of Chancery of the State of Delaware; provided, that if jurisdiction is not then available in the Court of Chancery of the State of Delaware, then any such legal action or proceeding may be brought in any federal court located in the State of Delaware or any other Delaware state court. Each of the parties hereby irrevocably submits to the jurisdiction of the aforesaid courts for itself and with respect to its property, generally and unconditionally, with regard to any such action or proceeding arising out of or relating to this Agreement and the transactions contemplated hereby. Each of the parties agrees not to commence any action, suit or proceeding relating thereto except in the courts described above in Delaware, other than actions in any court of competent jurisdiction to enforce any judgment, decree or award rendered by any such court in Delaware as described herein. Each of the parties further agrees that notice as provided herein shall constitute sufficient service of process and the parties further waive any argument that such service is insufficient. Each of the parties hereby irrevocably and unconditionally waives, and agrees not to assert, by way of motion or as a defense, counterclaim or otherwise, in any action or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby, (a) any claim that it is not personally subject to the jurisdiction of the courts in Delaware as described herein for any reason, (b) that it or its property is exempt or immune from jurisdiction of any such court or from any legal process commenced in such courts (whether through service of notice, attachment prior to judgment, attachment in aid of execution of judgment, execution of judgment or otherwise) and (c) that (i) the suit, action or proceeding in any such court is brought in an inconvenient forum, (ii) the venue of such suit, action or proceeding is improper or (iii) this Agreement, or the subject matter hereof, may not be enforced in or by such courts.

Section 8.12 Assignment; Successors. Neither this Agreement nor any of the rights, interests or obligations under this Agreement may be assigned or delegated, in whole or in part, by operation of law or otherwise, by any party without the prior written consent of the other parties, and any such assignment without such prior written consent shall be null and void. Subject to the preceding sentence, this Agreement will be binding upon, inure to the benefit of, and be enforceable by, the parties and their respective successors and assigns.

Section 8.13 Specific Performance. The parties agree that irreparable damage would occur in the event that the parties hereto do not perform the provisions of this Agreement in accordance with its terms or otherwise breach such provisions. Accordingly, the parties acknowledge and agree that each party shall be entitled to an injunction, specific performance and other equitable relief to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in the Court of Chancery of the State of Delaware, provided, that if jurisdiction is not then available in the Court of Chancery of the State of Delaware, then in any federal court located in the State of Delaware or any other Delaware state court, this being in addition to any other remedy to which such party is entitled at law or in equity. Each of the parties hereby further waives (a) any defense in any action for specific performance that a remedy at law would be adequate and (b) any requirement under any law to post security as a prerequisite to obtaining equitable relief.

Section 8.14 Currency. All references to “dollars” or “\$” or “US\$” in this Agreement refer to United States dollars, which is the currency used for all purposes in this Agreement.

Section 8.15 Severability. Whenever possible, each provision or portion of any provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable Law, but if any provision or portion of any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable Law or rule in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other provision or portion of any provision in such jurisdiction, and this Agreement shall be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision or portion of any provision had never been contained herein.

Section 8.16 Waiver of Jury Trial. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY WAIVES ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

Section 8.17 Counterparts. This Agreement may be executed in two or more counterparts, all of which shall be considered one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party.

Section 8.18 Facsimile or .pdf Signature. This Agreement may be executed by facsimile or .pdf signature and a facsimile or .pdf signature shall constitute an original for all purposes.

Section 8.19 No Presumption against Drafting Party. Each of Parent, the Merger Subs and the Company acknowledges that each party to this Agreement has been represented by counsel in connection with this Agreement and the transactions contemplated by this Agreement. Accordingly, any rule of law or any legal decision that would require interpretation of any claimed ambiguities in this Agreement against the drafting party has no application and is expressly waived.

*[The remainder of this page is intentionally left blank.]*

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

**CATABASIS PHARMACEUTICALS, INC.**

By: /s/ JILL C. MILNE

Name: Jill C. Milne

Title: President and Chief Executive Officer

**CABO MERGER SUB I, INC.**

By: /s/ BEN HARSHBARGER

Name: Ben Harshbarger

Title: President and Secretary

**CABO MERGER SUB II, LLC**

By: /s/ BEN HARSHBARGER

Name: Ben Harshbarger

Title: Secretary

**QUELLIS BIOSCIENCES, INC.**

By: /s/ JONATHAN VIOLIN

Name: Jonathan Violin

Title: Treasurer and Secretary

*[Signature Page to Agreement and Plan of Merger]*

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**Exhibit A**

Parent Support Agreements

See attached.

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**EXHIBIT A**

**FORM OF SUPPORT AGREEMENT**

**CATABASIS PHARMACEUTICALS, INC.**

**SUPPORT AGREEMENT**

THIS SUPPORT AGREEMENT (this "Agreement"), dated as of January 28, 2021 (the "Effective Date"), is made by and among Catabasis Pharmaceuticals, Inc., a Delaware corporation ("Parent"), Quellis Biosciences, Inc., a Delaware corporation (the "Company"), and the undersigned holder ("Stockholder") of shares of capital stock (the "Shares") of Parent.

WHEREAS, Parent, Cabo Merger Sub I, Inc., a Delaware corporation and a wholly owned subsidiary of Parent ("First Merger Sub"), Cabo Merger Sub II, LLC, a Delaware limited liability company and a wholly owned subsidiary of Parent ("Second Merger Sub"), and the Company, have entered into an Agreement and Plan of Merger, dated of even date herewith (the "Merger Agreement"), providing for the merger of First Merger Sub with and into the Company (the "First Merger") and, the merger of the Company with and into Second Merger Sub (the "Second Merger" and, together with the First Merger, the "Merger");

WHEREAS, Stockholder beneficially owns and has sole or shared voting power with respect to the number of Shares, and holds Parent Options to acquire the number of Shares indicated opposite Stockholder's name on Schedule 1 attached hereto;

WHEREAS, as an inducement and a condition to the willingness of Parent, First Merger Sub, Second Merger Sub and the Company to enter into the Merger Agreement, and in consideration of the substantial expenses incurred and to be incurred by them in connection therewith, Stockholder has agreed to enter into and perform this Agreement; and

WHEREAS, all capitalized terms used in this Agreement without definition herein shall have the meanings ascribed to them in the Merger Agreement.

NOW, THEREFORE, in consideration of, and as a condition to, Parent, First Merger Sub, Second Merger Sub and the Company's entering into the Merger Agreement and proceeding with the transactions contemplated thereby, and in consideration of the substantial expenses incurred and to be incurred by them in connection therewith, Stockholder, Parent and the Company agree as follows:

1. Agreement to Vote Shares. Stockholder agrees that, prior to the Expiration Date (as defined in Section 2 below), at any meeting of the stockholders of Parent or any adjournment or postponement thereof, or in connection with any written consent of the stockholders of Parent, with respect to the Conversion Proposal (defined below) or the Charter Amendment Proposal (defined below), Stockholder shall:

(a) appear at such meeting or otherwise cause the Shares[ and any New Shares (as defined in Section 3 below)]<sup>1</sup> to be counted as present thereat for purposes of calculating a quorum;

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<sup>1</sup> Note to Draft: Only for Stockholders executing lock-up agreements.

(b) from and after the date hereof until the Expiration Date, vote (or cause to be voted), or deliver a written consent (or cause a written consent to be delivered) covering all of the Shares[ and any New Shares] that Stockholder shall be entitled to so vote: (i) in favor of (A) the approval of the conversion of the Parent Preferred Stock issued pursuant to the Merger Agreement into shares of Parent Common Stock in accordance with Nasdaq Listing Rule 5635(a) (the “Conversion Proposal”) and, if applicable, (B) the approval of an amendment to the Certificate of Incorporation of Parent to authorize sufficient shares of Parent Common Stock for the conversion of the Parent Preferred Stock issued pursuant to the Merger Agreement and the Stock Purchase Agreement and/or to effectuate a reverse stock split (the “Charter Amendment Proposal”) and any matter that could reasonably be expected to facilitate the Conversion Proposal and the Charter Amendment Proposal; (ii) against any proposal to remove the limitation initially set at the discretion of holders of Parent Preferred Stock between 4.9% and 19.9% of the number of shares of Parent Common Stock outstanding immediately after giving effect to the issuance of shares of Parent Common Stock upon conversion (the “Beneficial Ownership Limitation”) restricting such holders from beneficially owning a number of shares of Parent Common Stock in excess of the Beneficial Ownership Limitation or any agreement, transaction or other matter that is intended to, or would reasonably be expected to, impede, interfere with, delay, postpone, discourage or materially and adversely affect the consummation of the Conversion Proposal or Charter Amendment Proposal; and (iii) to approve any proposal to adjourn or postpone the meeting to a later date, if there are not sufficient votes for the approval of the Conversion Proposal or Charter Amendment Proposal on the date on which such meeting is held. Stockholder shall not take or commit or agree to take any action inconsistent with the foregoing.

2. Expiration Date. As used in this Agreement, the term “Expiration Date” shall mean the earliest to occur of (a) 180 days from the date of this Agreement, (b) the approval of the Conversion Proposal, and (c) upon mutual written agreement of the parties to terminate this Agreement.

3. Additional Purchases. Stockholder agrees that any shares of capital stock or other equity securities of Parent that Stockholder purchases or with respect to which Stockholder otherwise acquires sole or shared voting power (including any proxy) after the execution of this Agreement and prior to the Expiration Date, whether by the exercise of any Parent Options or otherwise, including, without limitation, by gift, succession, in the event of a stock split or as a dividend or distribution of any Shares (“New Shares”), shall be subject to the terms and conditions of this Agreement to the same extent as if they constituted the Shares.

4. Share Transfers. [From and after the date hereof until the Expiration Date, Stockholder shall not, directly or indirectly, (a) sell, assign, transfer, tender, or otherwise dispose of (including, without limitation, by the creation of any Liens) any Shares or any New Shares acquired, (b) deposit any Shares or New Shares into a voting trust or enter into a voting agreement or similar arrangement with respect to such Shares or New Shares or grant any proxy or power of attorney with respect thereto (other than this Agreement), (c) enter into any Contract, option, commitment or other arrangement or understanding with respect to the direct or indirect sale, transfer, assignment or other disposition of (including, without limitation, by the creation of any Liens) any Shares or New Shares, or (d) take any action that would make any representation or warranty of Stockholder contained herein untrue or incorrect or have the effect of preventing or disabling Stockholder from performing Stockholder’s obligations under this Agreement. Notwithstanding the foregoing, Stockholder may make (1) transfers by will or by operation of Law or other transfers for estate-planning purposes, in which case this Agreement shall bind the transferee, (2) with respect to Stockholder’s Parent Options which expire on or prior to the Expiration Date, transfers, sale, or other disposition of Shares to Parent as payment for the (i) exercise price of Stockholder’s Parent Options and (ii) taxes applicable to the exercise of Stockholder’s Parent Options, (3) if Stockholder is a partnership or limited liability company, a transfer to one or more partners or members of Stockholder or to an Affiliate of Stockholder, or if Stockholder is a trust, a transfer to a beneficiary, provided that in each such case the applicable transferee has signed a voting agreement in substantially the form hereof and no such transfer will necessitate the filing of a Form 4 reporting such transfer, (4) transfers to another holder of the capital stock of the Company that has signed a voting agreement in substantially the form hereof, and (5) transfers, sales or other dispositions as the Company may otherwise agree in writing in its sole discretion. If any voluntary or involuntary transfer of any Shares covered hereby shall occur (including a transfer or disposition permitted by Section 4(1) through Section 4(5), sale by a Stockholder’s trustee in bankruptcy, or a sale to a purchaser at any creditor’s or court sale), the transferee (which term, as used herein, shall include any and all transferees and subsequent transferees of the initial transferee) shall take and hold such Shares subject to all of the restrictions, liabilities and rights under this Agreement, which shall continue in full force and effect, notwithstanding that such transferee is not a Stockholder and has not executed a counterpart hereof or joinder hereto.]<sup>2</sup>



5. Representations and Warranties of Stockholder. Stockholder hereby represents and warrants to Parent and the Company as follows:

(a) If Stockholder is an entity: (i) Stockholder is duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated, organized or constituted, (ii) Stockholder has all necessary power and authority to execute and deliver this Agreement, to perform Stockholder's obligations hereunder and to consummate the transactions contemplated hereby, and (iii) the execution and delivery of this Agreement, performance of Stockholder's obligations hereunder and the consummation of the transactions contemplated hereby by Stockholder have been duly authorized by all necessary action on the part of Stockholder and no other proceedings on the part of Stockholder are necessary to authorize this Agreement, or to consummate the transactions contemplated hereby. If Stockholder is an individual, Stockholder has the legal capacity to execute and deliver this Agreement, to perform Stockholder's obligations hereunder and to consummate the transactions contemplated hereby;

(b) this Agreement has been duly executed and delivered by or on behalf of Stockholder and, to Stockholder's knowledge and assuming this Agreement constitutes a valid and binding agreement of the Company and Parent, constitutes a valid and binding agreement with respect to Stockholder, enforceable against Stockholder in accordance with its terms, except as enforcement may be limited by general principles of equity whether applied in a court of Law or a court of equity and by bankruptcy, insolvency and similar Laws affecting creditors' rights and remedies generally;

(c) Stockholder beneficially owns the number of Shares indicated opposite Stockholder's name on Schedule 1, and will own any New Shares, free and clear of any Liens, and has sole or shared, and otherwise unrestricted, voting power with respect to such Shares or New Shares and none of the Shares or New Shares is subject to any voting trust or other agreement, arrangement or restriction with respect to the voting of the Shares or the New Shares, except as contemplated by this Agreement;

(d) to the knowledge of Stockholder, the execution and delivery of this Agreement by Stockholder does not, and the performance by Stockholder of his, her or its obligations hereunder and the compliance by Stockholder with any provisions hereof will not, violate or conflict with, result in a material breach of or constitute a default (or an event that with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of any Liens on any Shares or New Shares pursuant to, any Contract or other obligation or any order, arbitration award, judgment or decree to which Stockholder is a party or by which Stockholder is bound, or any Law, statute, rule or regulation to which Stockholder is subject or, in the event that Stockholder is a corporation, partnership, trust or other entity, any certificate of incorporation, bylaw or similar organizational document of Stockholder; except for any of the foregoing as would not reasonably be expected to prevent or delay the performance by Stockholder of his, her or its obligations under this Agreement in any material respect;

(e) the execution and delivery of this Agreement by Stockholder does not, and the performance of this Agreement by Stockholder does not and will not, require any consent, approval, authorization or permit of, or filing with or notification to, any Governmental Entity or regulatory authority by Stockholder except for applicable requirements, if any, of the Exchange Act, and except where the failure to obtain such consents, approvals, authorizations or permits, or to make such filings or notifications, would not prevent or delay the performance by Stockholder of his, her or its obligations under this Agreement in any material respect;

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<sup>2</sup> Note to Draft: Only for Stockholders executing lock-up agreements.

(f) no investment banker, broker, finder or other intermediary is entitled to a fee or commission from Parent or the Company in respect of this Agreement based upon any Contract made by or on behalf of Stockholder; and

(g) as of the date of this Agreement, there is no Action pending or, to the knowledge of Stockholder, threatened against Stockholder that would reasonably be expected to prevent or delay the performance by Stockholder of his, her or its obligations under this Agreement in any material respect.

6. Irrevocable Proxy. Subject to the penultimate sentence of this Section 6, by execution of this Agreement, Stockholder does hereby appoint the Company and any of its designees with full power of substitution and resubstitution, as Stockholder's true and lawful attorney and irrevocable proxy, to the fullest extent of Stockholder's rights with respect to the Shares, to vote and exercise all voting and related rights, including the right to sign Stockholder's name (solely in its capacity as a stockholder) to any stockholder consent, if Stockholder is unable to perform or otherwise does not perform his, her or its obligations under this Agreement, with respect to such Shares solely with respect to the matters set forth in Section 1 hereof. Stockholder intends this proxy to be irrevocable and coupled with an interest hereunder until the Expiration Date, hereby revokes any proxy previously granted by Stockholder with respect to the Shares and represents that none of such previously-granted proxies are irrevocable. The irrevocably proxy and power of attorney granted herein shall survive the death or incapacity of Stockholder and the obligations of Stockholder shall be binding on Stockholder's heirs, personal representatives, successors, transferees and assigns. Stockholder hereby agrees not to grant any subsequent powers of attorney or proxies with respect to any Shares with respect to the matters set forth in Section 1 until after the Expiration Date. Notwithstanding anything contained herein to the contrary, this irrevocable proxy shall automatically terminate upon the Expiration Date.

7. Other Remedies; Specific Performance. Except as otherwise provided herein, any and all remedies herein expressly conferred upon a party will be deemed cumulative with, and not exclusive of, any other remedy conferred hereby, or by Law or equity upon such party, and the exercise by a party of any one remedy will not preclude the exercise of any other remedy. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in the Court of Chancery of the State of Delaware, *provided*, that if jurisdiction is not then available in the Court of Chancery of the State of Delaware, then in any federal court located in the State of Delaware or any other Delaware state court, this being in addition to any other remedy to which such party is entitled at law or in equity. Each of the parties hereby further waives (a) any defense in any action for specific performance that a remedy at law would be adequate and (b) any requirement under any law to post security as a prerequisite to obtaining equitable relief.

8. Directors and Officers. [This Agreement shall apply to Stockholder solely in Stockholder's capacity as a stockholder of Parent and/or holder of Parent Options and not in Stockholder's capacity as a director, officer or employee of Parent or its Subsidiaries or in Stockholder's capacity as a trustee or fiduciary of any employee benefit plan or trust. Notwithstanding any provision of this Agreement to the contrary, nothing in this Agreement shall (or require Stockholder to attempt to) limit or restrict a director and/or officer of Parent in the exercise of his or her fiduciary duties as a director and/or officer of Parent or in his or her capacity as a trustee or fiduciary of any employee benefit plan or trust or prevent or be construed to create any obligation on the part of any director and/or officer of Parent or any trustee or fiduciary of any employee benefit plan or trust from taking any action in his or her capacity as such director, officer, trustee and/or fiduciary.]<sup>3</sup>

9. No Ownership Interest. Nothing contained in this Agreement shall be deemed to vest in the Company any direct or indirect ownership or incidence of ownership of or with respect to any Shares. All rights, ownership and economic benefits of and relating to the Shares shall remain vested in and belong to Stockholder, and the Company does not have authority to manage, direct, superintend, restrict, regulate, govern, or administer any of the policies or operations of Parent or exercise any power or authority to direct Stockholder in the voting of any of the Shares, except as otherwise provided herein.

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<sup>3</sup> Note to Draft: Only for Stockholders that are directors and/or officers.

10. Termination. This Agreement shall terminate and shall have no further force or effect as of the Expiration Date. Notwithstanding the foregoing, upon termination or expiration of this Agreement, no party shall have any further obligations or liabilities under this Agreement; *provided, however*, nothing set forth in this Section 10 or elsewhere in this Agreement shall relieve any party from liability for any fraud or for any willful and material breach of this Agreement prior to termination hereof.

11. Further Assurances. Stockholder shall, from time to time, execute and deliver, or cause to be executed and delivered, such additional or further consents, documents and other instruments as the Company or Parent may reasonably request for the purpose of effectively carrying out the transactions contemplated by this Agreement and the Merger Agreement.

12. Disclosure. Stockholder hereby agrees that Parent and the Company may publish and disclose in any registration statement, any prospectus filed with any regulatory authority in connection with the transactions contemplated by this Agreement and the Merger Agreement and any related documents filed with such regulatory authority and as otherwise required by Law, Stockholder's identity and ownership of Shares and the nature of Stockholder's commitments, arrangements and understandings under this Agreement and may further file this Agreement as an exhibit to any registration statement or prospectus or in any other filing made by Parent or the Company as required by Law or the terms of the Merger Agreement, including with the SEC or other regulatory authority, relating to the transactions contemplated thereby, all subject to prior review and an opportunity to comment by Stockholder's counsel. Prior to the Closing, Stockholder shall not, and shall use its reasonable best efforts to cause its representatives not to, directly or indirectly, make any press release, public announcement or other public communication that criticizes or disparages this Agreement or the Merger Agreement or any of the transactions contemplated thereby, without the prior written consent of Parent and the Company, provided that the foregoing shall not limit or affect any actions taken by Stockholder (or any affiliated officer or director of Stockholder) that would be permitted to be taken by Stockholder, Parent or the Company pursuant to the Merger Agreement; provided, further, that the foregoing shall not effect any actions of Stockholder the prohibition of which would be prohibited under applicable Law.

13. Notice. All notices and other communications hereunder shall be in writing and shall be deemed duly given (a) on the date of delivery if delivered personally or if by e-mail, upon written confirmation of receipt by e-mail or otherwise, (b) on the first Business Day following the date of dispatch if delivered utilizing a next-day service by a recognized next-day courier or (c) on the earlier of confirmed receipt or the fifth Business Day following the date of mailing if delivered by registered or certified mail, return receipt requested, postage prepaid to the Company or Parent, as the case may be, in accordance with Section 8.5 of the Merger Agreement and to Stockholder at his, her or its address or email address (providing confirmation of transmission) set forth on Schedule 1 attached hereto (or at such other address for a party as shall be specified by like notice).

14. Severability. Whenever possible, each provision or portion of any provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable Law, but if any provision or portion of any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable Law or rule in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other provision or portion of any provision in such jurisdiction, and this Agreement shall be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision or portion of any provision had never been contained herein.

15. Assignability. This Agreement shall be binding upon, and shall be enforceable by and inure solely to the benefit of, the parties hereto and their respective successors and assigns; *provided, however*, that neither this Agreement nor any of a party's rights, interests or obligations hereunder may be assigned or delegated, in whole or in part, by operation of law or otherwise, by such party without the prior written consent of the other parties hereto, and any attempted assignment or delegation of this Agreement or any of such rights, interests or obligations by such party without the prior written consent of the other parties shall be void and of no effect. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person (other than the parties hereto) any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

16. Waivers. No waivers of any breach of this Agreement extended by the Company or Parent to Stockholder shall be construed as a waiver of any rights or remedies of the Company or Parent, as applicable, with respect to any other stockholder of Parent who has executed an agreement substantially in the form of this Agreement with respect to Shares held or subsequently held by such stockholder or with respect to any subsequent breach of Stockholder or any other stockholder of Parent. No failure or delay of any party in exercising any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such right or power, or any course of conduct, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the parties hereunder are cumulative and are not exclusive of any rights or remedies which they would otherwise have hereunder.

17. Applicable Law; Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the Laws of the state of Delaware, regardless of the Laws that might otherwise govern under applicable principles of conflicts of Laws. Each of the parties irrevocably agrees that any legal action or proceeding arising out of or relating to this Agreement brought by any party or its Affiliates against any other party or its Affiliates shall be brought and determined in the Court of Chancery of the State of Delaware; provided, that if jurisdiction is not then available in the Court of Chancery of the State of Delaware, then any such legal action or proceeding may be brought in any federal court located in the State of Delaware or any other Delaware state court. Each of the parties hereby irrevocably submits to the jurisdiction of the aforesaid courts for itself and with respect to its property, generally and unconditionally, with regard to any such action or proceeding arising out of or relating to this Agreement and the transactions contemplated hereby. Each of the parties agrees not to commence any action, suit or proceeding relating thereto except in the courts described above in Delaware, other than actions in any court of competent jurisdiction to enforce any judgment, decree or award rendered by any such court in Delaware as described herein. Each of the parties further agrees that notice as provided herein shall constitute sufficient service of process and the parties further waive any argument that such service is insufficient. Each of the parties hereby irrevocably and unconditionally waives, and agrees not to assert, by way of motion or as a defense, counterclaim or otherwise, in any action or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby, (a) any claim that it is not personally subject to the jurisdiction of the courts in Delaware as described herein for any reason, (b) that it or its property is exempt or immune from jurisdiction of any such court or from any legal process commenced in such courts (whether through service of notice, attachment prior to judgment, attachment in aid of execution of judgment, execution of judgment or otherwise) and (c) that (i) the suit, action or proceeding in any such court is brought in an inconvenient forum, (ii) the venue of such suit, action or proceeding is improper or (iii) this Agreement, or the subject matter hereof, may not be enforced in or by such courts.

18. Waiver of Jury Trial. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY WAIVES ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

19. No Agreement Until Executed. Irrespective of negotiations among the parties or the exchanging of drafts of this Agreement, this Agreement shall not constitute or be deemed to evidence a Contract, agreement, arrangement or understanding between the parties hereto unless and until (a) the Parent Board has approved, for purposes of any applicable anti-takeover Laws and regulations and any applicable provision of the Certificate of Incorporation of Parent, the Merger Agreement and the transactions contemplated thereby, (b) the Merger Agreement is executed by all parties thereto, and (c) this Agreement is executed by all parties hereto.

20. Entire Agreement. This Agreement (including the schedules hereto) and the other agreements referred to in this Agreement constitute the entire agreement, and supersede all prior written agreements, arrangements, communications and understandings and all prior and contemporaneous oral agreements, arrangements, communications and understandings among the parties with respect to the subject matter hereof and thereof.

21. Counterparts. This Agreement may be executed in two or more counterparts, all of which shall be considered one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party.

22. Facsimile or .pdf Signature. This Agreement may be executed by facsimile or .pdf signature and a facsimile or .pdf signature shall constitute an original for all purposes.

23. Amendment. This Agreement may not be amended, supplemented or modified, and no provisions hereof may be modified or waived, except by an instrument in writing specifically designated as an amendment hereto, signed on behalf of each of the parties in interest at the time of the amendment; *provided, however*, that the rights or obligations of any Stockholder may be waived, amended or otherwise modified in a writing signed by Parent, the Company and Stockholder.

24. Fees and Expenses. Except as otherwise specifically provided herein, the Merger Agreement or any other agreement contemplated by the Merger Agreement to which a party hereto is a party, each party hereto shall bear its own expenses in connection with this Agreement and the transactions contemplated hereby.

25. Voluntary Execution of Agreement. This Agreement is executed voluntarily and without any duress or undue influence on the part or behalf of the parties. Each of the parties hereby acknowledges, represents and warrants that (a) it has read and fully understood this Agreement and the implications and consequences thereof; (b) it has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of its own choice, or it has made a voluntary and informed decision to decline to seek such counsel; and (c) it is fully aware of the legal and binding effect of this Agreement.

26. Construction. When a reference is made in this Agreement to a Section or Schedule such reference shall be to a Section or Schedule of this Agreement unless otherwise indicated. The headings contained in this Agreement or in any Schedule are for convenience of reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. All words used in this Agreement will be construed to be of such gender or number as the circumstances require. Any capitalized terms used in any Schedule but not otherwise defined therein shall have the meaning as defined in this Agreement. All Schedules annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth herein. The word “including” and words of similar import when used in this Agreement will mean “including, without limitation,” unless otherwise specified. The words “hereof,” “herein” and “hereunder” and words of similar import when used in this Agreement shall refer to the Agreement as a whole and not to any particular provision in this Agreement. The term “or” is not exclusive. The word “will” shall be construed to have the same meaning and effect as the word “shall.” References to days mean calendar days unless otherwise specified.

*[Remainder of Page has Intentionally Been Left Blank]*

EXECUTED as of the date first above written.

**[STOCKHOLDER]**

By:

Name (if an Entity):

Title (if an Entity):

*[Signature Page to Support Agreement]*

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EXECUTED as of the date first above written.

**CATABASIS PHARMACEUTICALS, INC.**

By:  
Name:  
Title:

**QUELLIS BIOSCIENCES, INC.**

By:  
Name:  
Title:

*[Signature Page to Support Agreement]*

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**SCHEDULE 1**

| <b>Name, Address and Email Address of Stockholder</b> | <b>Shares<br/>of<br/>Parent<br/>Common<br/><u>Stock</u></b> | <b><u>Parent<br/>Options</u></b> |
|---|---|----------------------------------|
|---|---|----------------------------------|

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**Exhibit B**

Lock-Up Agreements

See attached.

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EXHIBIT B

FORM OF LOCK-UP AGREEMENT

LOCK-UP AGREEMENT

January 28, 2021

Catabasis Pharmaceuticals, Inc.  
100 High Street, Floor 28  
Boston, Massachusetts 02110

Ladies and Gentlemen:

The undersigned signatory of this lock-up agreement (this "Lock-Up Agreement") understands that Catabasis Pharmaceuticals, Inc., a Delaware corporation ("Parent"), has entered into an Agreement and Plan of Merger, dated as of January 28, 2021 (as the same may be amended from time to time, the "Merger Agreement") with Cabo Merger Sub I, Inc., a Delaware corporation and a wholly owned subsidiary of Parent, Cabo Merger Sub II, LLC, a Delaware limited liability company and a wholly owned subsidiary of Parent, and Quellis Biosciences, Inc., a Delaware corporation (the "Company"). Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed to such terms in the Merger Agreement.

As a condition and inducement to each of the parties to enter into the Merger Agreement and to consummate the transactions contemplated thereby, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned hereby irrevocably agrees that, subject to the exceptions set forth herein, without the prior written consent of Parent, the undersigned will not, during the period commencing upon the Closing and ending on the date that is 180 days after the Closing Date (the "Restricted Period"):

i. offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Parent Common Stock or any securities convertible into or exercisable or exchangeable for Parent Common Stock (including without limitation, Parent Common Stock or such other securities which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the SEC and securities of Parent which may be issued upon exercise of an option to purchase Parent Common Stock or a warrant to purchase Parent Common Stock) that are currently or hereafter owned by the undersigned (collectively, the "Undersigned's Shares"), or publicly disclose the intention to make any such offer, sale, pledge, grant, transfer or disposition;

ii. enter into any swap, short sale, hedge or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Undersigned's Shares regardless of whether any such transaction described in clause (i) above or this clause (ii) is to be settled by delivery of Parent Common Stock or other securities, in cash or otherwise; or

iii. make any demand for, or exercise any right with respect to, the registration of any shares of Parent Common Stock or any security convertible into or exercisable or exchangeable for Parent Common Stock (other than such rights set forth in the Merger Agreement).

The restrictions and obligations contemplated by this Lock-Up Agreement shall not apply to:

a. transfers of the Undersigned's Shares:

i. if the undersigned is a natural person, (A) to any person related to the undersigned by blood or adoption who is an immediate family member of the undersigned, or by marriage or domestic partnership (a "Family Member"), or to a trust formed for the benefit of the undersigned or any of the undersigned's Family Members, (B) to the undersigned's estate, following the death of the undersigned, by will, intestacy or other operation of Law, (C) as a bona fide gift or a charitable contribution, (D) by operation of Law pursuant to a qualified domestic order or in connection with a divorce settlement or (E) to any partnership, corporation or limited liability company which is controlled by the undersigned and/or by any such Family Member(s);

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ii. if the undersigned is a corporation, partnership or other entity, (A) to another corporation, partnership, or other entity that is an affiliate (as defined under Rule 12b-2 of the Exchange Act) of the undersigned, including investment funds or other entities under common control or management with the undersigned, (B) as a distribution or dividend to equity holders, current or former general or limited partners, members or managers (or to the estates of any of the foregoing), as applicable, of the undersigned (including upon the liquidation and dissolution of the undersigned pursuant to a plan of liquidation approved by the undersigned's equity holders), (C) as a bona fide gift or a charitable contribution or (D) transfers or dispositions not involving a change in beneficial ownership; or

iii. if the undersigned is a trust, to any grantors or beneficiaries of the trust; provided that, in the case of any transfer or distribution pursuant to this clause (a), such transfer is not for value and each donee, heir, beneficiary or other transferee or distributee shall sign and deliver to Parent a lock-up agreement in the form of this Lock-Up Agreement with respect to the shares of Parent Common Stock or such other securities that have been so transferred or distributed;

b. the exercise of an option to purchase Parent Common Stock (including a net or cashless exercise of an option to purchase Parent Common Stock), and any related transfer of shares of Parent Common Stock to Parent for the purpose of paying the exercise price of such options or for paying taxes (including estimated taxes) due as a result of the exercise of such options; provided that, for the avoidance of doubt, the underlying shares of Parent Common Stock shall continue to be subject to the restrictions on transfer set forth in this Lock-Up Agreement;

c. transfers to Parent in connection with the net settlement of any other equity award that represents the right to receive in the future shares of Parent Common Stock, settled in Parent Common Stock, to pay any tax withholding obligations; provided that, for the avoidance of doubt, the underlying shares of Parent Common Stock shall continue to be subject to the restrictions on transfer set forth in this Lock-Up Agreement;

d. the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of Parent Common Stock; provided that such plan does not provide for any transfers of Parent Common Stock during the Restricted Period;

e. transfers by the undersigned of shares of Parent Common Stock purchased by the undersigned on the open market or in a public offering by Parent, in each case following the Closing Date;

f. pursuant to a bona-fide third party tender offer, merger, consolidation or other similar transaction made to all holders of Parent's capital stock involving a change of control of Parent, provided that in the event that such tender offer, merger, consolidation or other such transaction is not completed, the Undersigned's Shares shall remain subject to the restrictions contained in this Lock-Up Agreement; or

g. pursuant to an order of a court or regulatory agency;

and provided, further, that, with respect to each of (a), (b), (c), and (d) above, no filing by any party (including any donor, donee, transferor, transferee, distributor or distributee) under Section 16 of the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with such transfer or disposition during the Restricted Period (other than (i) any exit filings or public announcements that may be required under applicable federal and state securities Laws or (ii) in respect of a required filing under the Exchange Act in connection with the exercise of an option to purchase Parent Common Stock or in connection with the net settlement of any other equity award that represents the right to receive in the future shares of Parent Common Stock, settled in Parent Common Stock, that would otherwise expire during the Restricted Period, provided that reasonable notice shall be provided to Parent prior to any such filing).

Any attempted transfer in violation of this Lock-Up Agreement will be of no effect and null and void, regardless of whether the purported transferee has any actual or constructive knowledge of the transfer restrictions set forth in this Lock-Up Agreement, and will not be recorded on the share register of Parent. In furtherance of the foregoing, the undersigned agrees that Parent and any duly appointed transfer agent for the registration or transfer of the securities described herein are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Lock-Up Agreement. Parent may cause the legend set forth below, or a legend substantially equivalent thereto, to be placed upon any certificate(s) or other documents, ledgers or instruments evidencing the undersigned's ownership of Parent Common Stock:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO AND MAY ONLY BE TRANSFERRED IN COMPLIANCE WITH A LOCK-UP AGREEMENT, A COPY OF WHICH IS ON FILE AT THE PRINCIPAL OFFICE OF THE COMPANY.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned.

The undersigned understands that if the Merger Agreement is terminated for any reason, the undersigned shall be released from all obligations under this Lock-Up Agreement. The undersigned understands that Parent and the Company are proceeding with the transactions contemplated by the Merger Agreement in reliance upon this Lock-Up Agreement.

Any and all remedies herein expressly conferred upon Parent or the Company will be deemed cumulative with and not exclusive of any other remedy conferred hereby, or by Law or equity, and the exercise by Parent or the Company of any one remedy will not preclude the exercise of any other remedy. The undersigned agrees that irreparable damage would occur to Parent and/or the Company in the event that any provision of this Lock-Up Agreement were not performed in accordance with its specific terms or were otherwise breached. It is accordingly agreed that Parent and the Company shall be entitled to an injunction or injunctions to prevent breaches of this Lock-Up Agreement and to enforce specifically the terms and provisions hereof in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which Parent or the Company is entitled at Law or in equity, and the undersigned waives any bond, surety or other security that might be required of Parent or the Company with respect thereto.

In the event that any holder of Parent's securities that are subject to a substantially similar agreement entered into by such holder, other than the undersigned, is permitted by Parent to sell or otherwise transfer or dispose of shares of Parent Common Stock for value other than as permitted by this or a substantially similar agreement entered into by such holder, the same percentage of shares of Parent Common Stock held by the undersigned shall be immediately and fully released on the same terms from any remaining restrictions set forth herein (the "Pro-Rata Release"); provided, however, that such Pro-Rata Release shall not be applied unless and until permission has been granted by Parent to an equity holder or equity holders to sell or otherwise transfer or dispose of all or a portion of such equity holders shares of Parent Common Stock in an aggregate amount in excess of 1% of the number of shares of Parent Common Stock originally subject to a substantially similar agreement.

Upon the release of any of the Undersigned's Shares from this Lock-Up Agreement, Parent will cooperate with the undersigned to facilitate the timely preparation and delivery of certificates representing the Undersigned Shares without the restrictive legend above or the withdrawal of any stop transfer instructions.

This Lock-Up Agreement and any claim, controversy or dispute arising under or related to this Lock-Up Agreement shall be governed by and construed in accordance with the Laws of the state of Delaware, without regard to the conflict of Laws principles thereof.

This Lock-Up Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument. The exchange of a fully executed Lock-Up Agreement (in counterparts or otherwise) by Parent, the Company and the undersigned by facsimile or electronic transmission in .pdf format shall be sufficient to bind such parties to the terms and conditions of this Lock-Up Agreement.

Very truly yours,

Print Name of Stockholder:

Signature (for individuals):

Signature (for entities):

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

Accepted and Agreed by CATABASIS PHARMACEUTICALS, INC.:

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

Accepted and Agreed by QUELLIS BIOSCIENCES, INC.:

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

*[Signature Page to Lock-up Agreement]*

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**Exhibit C**

Stock Purchase Agreement

See attached.

(See Exhibit 10.1 to the Current Report on Form 8-K which this Exhibit C is a part)

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**Exhibit D**

Exchange Ratio Calculation

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**Exhibit E**

Form of Certificate of Designation

See attached.

(See Exhibit 3.1 to the Current Report on Form 8-K which this Exhibit E is a part)

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CATABASIS PHARMACEUTICALS, INC.  
CERTIFICATE OF DESIGNATION OF PREFERENCES,  
RIGHTS AND LIMITATIONS  
OF  
SERIES X CONVERTIBLE PREFERRED STOCK

PURSUANT TO SECTION 151 OF THE  
DELAWARE GENERAL CORPORATION LAW

CATABASIS PHARMACEUTICALS, INC., a Delaware corporation (the “**Corporation**”), in accordance with the provisions of Section 103 of the Delaware General Corporation Law (the “**DGCL**”) does hereby certify that, in accordance with Sections 141(c) and 151 of the DGCL, the following resolution was duly adopted by the Board of Directors of the Corporation, on January 28, 2021:

**WHEREAS**, the Corporation wishes to designate the following series of non-voting convertible preferred stock which shall otherwise be economically equal to the Common Stock of the Corporation, and which shall be convertible into Common Stock of the Corporation subject to receipt of Stockholder Approval (defined below);

**RESOLVED**, pursuant to authority expressly set forth in the Restated Certificate of Incorporation of the Corporation, as amended (the “**Certificate of Incorporation**”), (i) the issuance of a series of Preferred Stock designated as the Series X Convertible Preferred Stock, par value \$0.001 per share, of the Corporation is hereby authorized; (ii) the issuance of up to 91,380 shares of Series X Convertible Preferred Stock pursuant to the terms of (x) the Stock Purchase Agreement, dated January 28, 2021, by and among the Corporation and the initial Holders (as defined below) (the “**Purchase Agreement**”) and (y) the Agreement and Plan of Merger, dated January 28, 2021, by and among the Corporation, Cabo Merger Sub I, Inc., Cabo Merger Sub II, LLC and Quellis Biosciences, Inc. (the “**Merger Agreement**”) is hereby authorized; and (iii) the designation, number of shares, powers, preferences, rights, qualifications, limitations and restrictions thereof (in addition to any provisions set forth in the Certificate of Incorporation that are applicable to the Preferred Stock of all classes and series) are hereby fixed, and the Certificate of Designation of Preferences, Rights and Limitations of Series X Convertible Preferred Stock is hereby approved as follows:

**SERIES X CONVERTIBLE PREFERRED STOCK**

Section 1            Definitions. For the purposes hereof, the following terms shall have the following meanings:

“**Affiliate**” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with (as such terms are used in and construed under Rule 144 under the Securities Act of 1933), a Person. With respect to a Holder, any investment fund or managed account that is managed on a discretionary basis by the same investment manager as such Holder will be deemed to be an Affiliate of such Holder.

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

“**Closing Sale Price**” means, for any security as of any date, the last closing trade price for such security immediately prior to 4:00 p.m., New York City time, on the principal Trading Market where such security is listed or traded, as reported by Bloomberg, L.P. (or an equivalent, reliable reporting service mutually acceptable to and hereafter designated by Holders of a majority of the then-outstanding Series X Preferred Stock and the Corporation), or if the foregoing do not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, L.P., or, if no last trade price is reported for such security by Bloomberg, L.P., the average of the bid prices of any market makers for such security as reported on the OTC Pink Market by OTC Markets Group, Inc. If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as determined in good faith by the Board of Directors of the Corporation.

“**Commission**” means the U.S. Securities and Exchange Commission.

“**Common Stock**” means the Corporation’s common stock, par value of \$0.001 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.

“**Conversion Shares**” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Series X Preferred Stock in accordance with the terms hereof, including the Initial Conversion Shares.

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

“**Holder**” means any holder of Series X Preferred Stock.

“**Person**” means any 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.

“**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).

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Section 2                      Designation, Amount and Par Value; Assignment.

(a)                      The series of preferred stock designated by this Certificate of Designation shall be designated as the Corporation's Series X Convertible Preferred Stock (the "**Series X Preferred Stock**") and the number of shares so designated shall be 91,380. Series X Preferred Stock shall have a par value of \$0.001 per share.

(b)                      The Corporation shall maintain a register of shares of the Series X Preferred Stock, upon records to be maintained by the Corporation for that purpose (the "**Series X Preferred Stock Register**"), in the name of the Holders thereof from time to time, including the name, address, electronic mail address and facsimile number of each such Holder. The Corporation may deem and treat the registered Holder of shares of Series X Preferred Stock as the absolute owner thereof for the purpose of any conversion thereof and for all other purposes. Shares of Series X Preferred Stock may be issued solely in book entry form or, if requested by any Holder, such Holder's shares may be issued in certificated form. The Corporation shall register the transfer of any shares of Series X Preferred Stock in the Series X Preferred Stock Register, upon surrender of the certificates (if applicable) evidencing such shares to be transferred, duly endorsed by the Holder thereof, to the Corporation at its address specified herein. Upon any such registration or transfer, a new certificate evidencing the shares of Series X Preferred Stock so transferred shall be issued to the transferee and a new certificate evidencing the remaining portion of the shares not so transferred, if any, shall be issued to the transferring Holder, in each case, within three Business Days. The provisions of this Certificate of Designation are intended to be for the benefit of all Holders from time to time and shall be enforceable by any such Holder.

Section 3                      Dividends. Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of the Series X Preferred Stock (on an as-if-converted-to-Common-Stock basis, without regard to the Beneficial Ownership Limitation) equal to and in the same form, and in the same manner, as dividends (other than dividends on shares of the Common Stock payable in the form of Common Stock) actually paid on shares of the Common Stock when, as and if such dividends (other than dividends payable in the form of Common Stock) are paid on shares of the Common Stock. Other than as set forth in the previous sentence, no other dividends shall be paid on shares of Series X Preferred Stock, and the Corporation shall pay no dividends (other than dividends payable in the form of Common Stock) on shares of the Common Stock unless it simultaneously complies with the previous sentence.

Section 4                      Voting Rights; Amendments.

(a)                      Except as otherwise provided herein or as otherwise required by the DGCL, the Series X Preferred Stock shall have no voting rights. However, as long as any shares of Series X Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of Series X Preferred Stock: (i) alter or change adversely the powers, preferences or rights given to the Series X 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, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Series X 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 or otherwise, (ii) issue further shares of Series X Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series X Preferred Stock, (iii) prior to the Stockholder Approval (as defined below), consummate either: (A) any Fundamental Transaction (as defined below) or (B) any merger or consolidation of the Corporation with or into another entity or any stock sale to, or other business combination in which the stockholders of the Corporation immediately before such transaction do not hold at least a majority of the capital stock of the Corporation immediately after such transaction, or (iv) enter into any agreement with respect to any of the foregoing. Holders of shares of Common Stock acquired upon the conversion of shares of Series X Preferred Stock shall be entitled to the same voting rights as each other holder of Common Stock, except that such holders may not vote such shares upon the proposal for Stockholder Approval in accordance with Rule 5635 of the listing rules of The Nasdaq Stock Market LLC.

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(b) Any vote required or permitted under Section 4(a) may be taken at a meeting of the Holders of the Series X Preferred Stock or through the execution of an action by written consent in lieu of such meeting, provided that the consent is executed by Holders representing a majority of the outstanding shares of Series X Preferred Stock, unless a higher percentage is required by the DGCL, in which case the written consent of the Holders of not less than such higher percentage shall be required.

Section 5 Rank; Liquidation.

(a) The Series X Preferred Stock shall rank: (i) senior to any class or series of capital stock of the Corporation hereafter created specifically ranking by its terms junior to the Series X Preferred Stock (“**Junior Securities**”); (ii) on parity with the Common Stock and any other class or series of capital stock of the Corporation hereafter created specifically ranking by its terms on parity with the Series X Preferred Stock (the “**Parity Securities**”); and (iii) junior to any class or series of capital stock of the Corporation hereafter created specifically ranking by its terms senior to the Series X Preferred Stock (“**Senior Securities**”), in each case, as to distributions of assets upon liquidation, dissolution or winding up of the Corporation, whether voluntarily or involuntarily (all such distributions being referred to collectively as “**Distributions**”).

(b) Subject to the prior and superior rights of the holders of any Senior Securities of the Corporation, upon liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary (a “**Liquidation**”), each Holder shall be entitled to receive, in preference to any Distributions of any of the assets or surplus funds of the Corporation to the holders of the Junior Securities, and *pari passu* with any Distribution to the holders of the Parity Securities, an equivalent amount of Distributions as would be paid on the Common Stock underlying the Series X Preferred Stock, determined on an as-converted basis (without regard to the Beneficial Ownership Limitation), plus an additional amount equal to any dividends declared but unpaid on such shares, before any payments shall be made or any assets distributed to holders of any class of Junior Securities. If, upon any such Liquidation, the assets of the Corporation shall be insufficient to pay the Holders of shares of the Series X Preferred Stock the amount required under the preceding sentence, then all remaining assets of the Corporation shall be distributed ratably to the Holders and holders of Parity Securities in accordance with the respective amounts that would be payable on all such securities if all amounts payable thereon were paid in full. A Fundamental Transaction shall not be deemed a Liquidation unless the Corporation expressly declares that such Fundamental Transaction shall be treated as if it were a Liquidation.

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Section 6      Conversion.

(a)      Automatic and Optional Conversions. The shares of Series X Preferred Stock shall be convertible into shares of Common Stock as follows:

i.      Automatic Conversion on Stockholder Approval. Effective as of 5:00 p.m. (New York City time) on the fourth Business Day after the date on which the Corporation's stockholders approve the conversion of the Series X Preferred Stock into shares of Common Stock in accordance with the listing rules of the Nasdaq Stock Market, as set forth in the Purchase Agreement (the "**Stockholder Approval**"), each share of Series X Preferred Stock then outstanding shall automatically convert into a number of shares of Common Stock equal to the Conversion Ratio, subject to the Beneficial Ownership Limitation set forth in Section 6(c) (the "**Automatic Conversion**"). In determining the application of the Beneficial Ownership Limitations solely with respect to the Automatic Conversion, the Corporation shall calculate beneficial ownership for each Holder assuming beneficial ownership of: (x) the number of shares of Common Stock issuable 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 45 days prior to the date of Stockholder Approval (a "**Beneficial Ownership Statement**"). If a Holder fails to provide the Corporation with a Beneficial Ownership Statement within 45 days prior to the date of Stockholder Approval, then the Corporation shall presume the Holder's beneficial ownership of Common Stock (apart from the Initial Conversion Shares) to be zero. The shares of Common Stock issued upon the Automatic Conversion are referred to as the "**Initial Conversion Shares**" and shares of Series X Preferred Stock that are converted in the Automatic Conversion are referred to as the "**Converted Stock**". The Initial Conversion Shares shall be issued as follows:

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

2.      Converted Stock that is issued in certificated form shall be deemed converted into the corresponding Initial Conversion Shares on the date of Automatic Conversion and the Holder's rights as a holder of such shares of Converted Stock shall cease and terminate on such date, excepting only the right to receive the Initial Conversion Shares upon the Holder tendering to the Corporation (or its designated agent) the stock certificate(s) (duly endorsed) representing such certificated Converted Stock.

3.      Notwithstanding the cancellation 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.

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ii. Optional Conversion Following Stockholder Approval.

1. Subject to Sections 6(a)(i) and 6(c), at any time and from time to time as of 5:00 p.m. (New York City time) on the fourth Business Day after Stockholder Approval is obtained, each Holder may, at its option, effect conversions other than the Automatic Conversion of shares of Series X Preferred Stock into a number of shares of Common Stock equal to the Conversion Ratio (each, an “**Optional Conversion**”) by providing the Corporation with the form of conversion notice attached hereto as **Annex A** (a “**Notice of Conversion**”), duly completed and executed. Provided the Corporation’s transfer agent is participating in the Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer program, the Notice of Conversion may specify, at the Holder’s election, whether the applicable Conversion Shares shall be credited to the account of the Holder’s prime broker with DTC through its Deposit Withdrawal Agent Commission system (a “**DWAC Delivery**”).

2. The date on which an Optional Conversion shall be deemed effective (the “**Conversion Date**”) shall be the Trading Day that the Notice of Conversion, completed and executed, is sent via email to, and received during regular business hours by, the Corporation; provided, that the original certificate(s) (if any) representing such shares of Series X Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion, are received by the Corporation within two (2) Trading Days thereafter. In all other cases, the Conversion Date shall be defined as the Trading Day on which the original certificate(s) (if any) representing such shares of Series X Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion, are received by the Corporation. The calculations set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error.

(b) Conversion Ratio. The “**Conversion Ratio**” for each share of Series X Preferred Stock shall initially be 1,000 shares of Common Stock issuable upon the conversion of each share of Series X Preferred Stock (corresponding to a ratio of 1,000:1), subject to adjustment as provided herein.

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(c) **Beneficial Ownership Limitation.** Notwithstanding anything herein to the contrary, the Corporation shall not effect any conversion of the Series X Preferred Stock, and a Holder shall not have the right to convert any portion of the Series X Preferred Stock, to the extent that, after giving effect to an attempted conversion set forth on an applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any other Person whose beneficial ownership of Common Stock would be aggregated with the 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 (as defined below). 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 X Preferred Stock subject to the Notice of Conversion or the Automatic 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 X 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 6(c), 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 6(c), 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 X 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 9.99% 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 such Notice of Conversion or Automatic Conversion (as applicable) to the extent permitted pursuant to this Section 6(c). In the context of any Optional Conversion only, 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 19.99%, 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. 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 6(c). Notwithstanding the foregoing, at any time following notice from the Company of a Fundamental Transaction, the Holder may change the Beneficial Ownership Limitation (not to exceed 19.99%) effective immediately upon written notice to the Corporation and may reinstitute a Beneficial Ownership Limitation at any time thereafter effective immediately upon written notice to the Corporation.

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(d) Mechanics of Conversion

i. Delivery of Certificate or Electronic Issuance Upon Conversion. Not later than three (3) Trading Days after the applicable Conversion Date, or if the Holder requests the issuance of physical certificate(s), three (3) Trading Days after receipt by the Corporation of the original certificate(s) representing such shares of Series X Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion (the “**Share Delivery Date**”), the Corporation shall either: (a) deliver, or cause to be delivered, to the converting Holder a physical certificate or certificates representing the number of Conversion Shares being acquired upon the conversion of shares of Series X Preferred Stock, or (b) in the case of a DWAC Delivery (if so requested by the Holder), electronically transfer such Conversion Shares by crediting the account of the Holder’s prime broker with DTC through its DWAC system. If in the case of any Notice of Conversion such certificate or certificates for the Conversion Shares are not delivered to or as directed by or, in the case of a DWAC Delivery, such shares are not electronically delivered to or as directed by, the applicable Holder by the Share Delivery Date, the applicable Holder shall be entitled to elect to rescind such Notice of Conversion by written notice to the Corporation at any time on or before its receipt of such certificate or certificates for Conversion Shares or electronic receipt of such shares, as applicable, in which event the Corporation shall promptly return to such Holder any original Series X Preferred Stock certificate delivered to the Corporation and such Holder shall promptly return to the Corporation any Common Stock certificates or otherwise direct the return of any shares of Common Stock delivered to the Holder through the DWAC system, representing the shares of Series X Preferred Stock unsuccessfully tendered for conversion to the Corporation.

ii. Obligation Absolute. Subject to Section 6(c) and Section 6(d)(v) hereof and subject to Holder’s right to rescind a Notice of Conversion pursuant to Section 6(d)(i) above, the Corporation’s obligation to issue and deliver the Conversion Shares upon conversion of Series X Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other Person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares. Subject to Section 6(c) and Section 6(d)(v) hereof and subject to Holder’s right to rescind a Notice of Conversion pursuant to Section 6(d)(i) above, in the event a Holder shall elect to convert any or all of its Series X Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or anyone associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Series X Preferred Stock of such Holder shall have been sought and obtained by the Corporation, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the value of the Conversion Shares into which would be converted the Series X Preferred Stock which is subject to such injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, the Corporation shall, subject to Section 6(c) and Section 6(d)(v) hereof and subject to Holder’s right to rescind a Notice of Conversion pursuant to Section 6(d)(i) above, issue Conversion Shares upon a properly noticed conversion.

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iii. Cash Settlement. If, at any time after the earlier of receipt of Stockholder Approval or six months after the initial issuance of the Series X Preferred Stock, the Corporation fails to deliver to a Holder such certificate or certificates, or electronically deliver (or cause its transfer agent to electronically deliver) such shares in the case of a DWAC Delivery, pursuant to Section 6(d)(i) on or prior to the third (3rd) Trading Day after the Share Delivery Date applicable to such conversion (other than a failure caused by incorrect or incomplete information provided by Holder to the Corporation), then, unless the Holder has rescinded the applicable Notice of Conversion pursuant to Section 6(d)(i) above, the Corporation shall, at the request of the Holder, pay an amount equal to the Fair Value (defined below) of such undelivered shares, with such payment to be made within two Business Days from the date of request by the Holder, whereupon the Corporation's obligations to deliver such shares underlying the Notice of Conversion shall be extinguished. For purposes of this Section 6(d)(iii), the "**Fair Value**" of shares shall be fixed with reference to the last reported Closing Sale Price as of the Trading Day on which the Notice of Conversion is delivered to the Corporation. For the avoidance of doubt, the cash settlement provisions set forth in this Section 6(d)(iii) shall be available irrespective of the reason for the Corporation's failure to timely deliver Conversion Shares (other than a failure caused by incorrect or incomplete information provided by Holder to the Corporation or the application of the Beneficial Ownership Limitation), including due to the lack of obtaining Stockholder Approval, or due to applicable stock exchange rules.

iv. Compensation for Buy-In on Failure to Timely Deliver Certificates Upon Conversion. If the Corporation fails to deliver to a Holder the applicable certificate or certificates or to effect a DWAC Delivery, as applicable, by the Share Delivery Date pursuant to Section 6(d)(i) (other than a failure caused by incorrect or incomplete information provided by Holder to the Corporation), and if after such Share Delivery Date such Holder is required by its brokerage firm 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 such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "**Buy-In**"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount by which (x) such Holder's total purchase price (including any brokerage commissions) for the shares of Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Series X Preferred Stock equal to the number of shares of Series X Preferred Stock submitted for conversion or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(d)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Series X Preferred Stock with respect to which the actual sale price (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice, within three (3) Trading Days after the occurrence of a Buy-In, indicating the amounts payable to such Holder in respect of such Buy-In together with applicable confirmations and other evidence reasonably requested by the Corporation. 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 Corporation's failure to timely deliver certificates representing shares of Common Stock upon conversion of the shares of Series X Preferred Stock as required pursuant to the terms hereof or the cash settlement remedy set forth in Section 6(d)(iii); provided, however, that the Holder shall not be entitled to both (i) require the reissuance of the shares of Series X Preferred Stock submitted for conversion for which such conversion was not timely honored and (ii) receive the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(d)(i).

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v. Reservation of Shares Issuable Upon Conversion. The Corporation covenants that at all times, it 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 X Preferred Stock, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holders of the Series X Preferred Stock, not less than such aggregate number of shares of the Common Stock as shall be issuable (taking into account the adjustments of Section 7) upon the conversion of all outstanding shares of Series X 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.

vi. Fractional Shares. No fractional shares or scrip representing fractional shares of Common Stock shall be issued upon the conversion of the Series X Preferred Stock. As to any fraction of a share which a Holder would otherwise be entitled to receive upon such conversion, the Corporation shall pay a cash adjustment in respect of such fractional share of Common Stock in an amount equal to such fraction multiplied by the Fair Value. 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 X 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.

vii. Transfer Taxes. The issuance of certificates for shares of the Common Stock upon conversion of the Series X 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 issue or 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 issuance and delivery of any such certificate upon conversion in a name other than that of the registered Holder(s) of such shares of Series X Preferred Stock and the Corporation shall not be required to issue or deliver such certificates unless or until the Person or Persons requesting the issuance 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.

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(e) Status as Stockholder. Upon each Conversion Date, (i) the shares of Series X Preferred Stock being converted shall be deemed converted into shares of Common Stock and (ii) the Holder's rights as a holder of such converted shares of Series X Preferred Stock shall cease and terminate, excepting only the right to receive certificates for such shares of Common Stock and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the 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 Series X Preferred Stock. In no event shall the Series X Preferred Stock convert into shares of Common Stock prior to the Stockholder Approval.

#### Section 7 Certain Adjustments.

(a) Stock Dividends and Stock Splits. If the Corporation, at any time while this Series X Preferred Stock is outstanding: (A) 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 this Series X Preferred Stock) with respect to the then outstanding shares of Common Stock; (B) subdivides outstanding shares of Common Stock into a larger number of shares; or (C) 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 7(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 or combination.

(b) Fundamental Transaction. If, at any time while this Series X 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 such a transaction in which the Corporation is the surviving or continuing entity and its Common Stock is 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 7(a) 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 this Series X 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 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 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 this Series X 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 designation 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 7(b) and insuring that this Series X 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 20 calendar days prior to the date on which such Fundamental Transaction is expected to become effective or close.

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(c) Calculations. All calculations under this Section 7 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 7, 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 any treasury shares of the Corporation) issued and outstanding.

Section 8 Redemption. The shares of Series X Preferred Stock shall not be redeemable; 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, nor shall the foregoing limit the Holder's rights under Section 6(d)(iii).

Section 9 Transfer. A Holder may transfer such shares of Series X Preferred Stock in whole, or in part, together with the accompanying rights set forth herein, 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 of Series X Preferred Stock may reasonably request in order to carry out the intent and accomplish the purposes of this Section 9.

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(a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders 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 the Corporation, at 100 High Street, Floor 28, Boston, Massachusetts Attention: General Counsel, email: bharshbarger@catabasis.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. Any and all notices or other communications or deliveries to be provided by the Corporation 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 each Holder, at the principal place of business of such Holder. 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 prior to 5:30 p.m. (New York City 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 between 5:30 p.m. and 11:59 p.m. (New York City time) on any date, (iii) the second 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.

(b) Lost or Mutilated Series X Preferred Stock Certificate. If a Holder's Series X Preferred Stock certificate 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 X 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. 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.

(c) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Certificate of Designation shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Certificate of Designation or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Certificate of Designation on one or more occasions shall not be considered a waiver or deprive that party (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Certificate of Designation. Any waiver by the Corporation or a Holder must be in writing. Notwithstanding any provision in this Certificate of Designation to the contrary, any provision contained herein and any right of the Holders of Series X Preferred Stock granted hereunder may be waived as to all shares of Series X Preferred Stock (and the Holders thereof) upon the written consent of the Holders of not less than a majority of the shares of Series X Preferred Stock then outstanding, unless a higher percentage is required by the DGCL, in which case the written consent of the Holders of not less than such higher percentage shall be required.

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(d) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances.

(e) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

(f) Headings. The headings contained herein are for convenience only, do not constitute a part of this Certificate of Designation and shall not be deemed to limit or affect any of the provisions hereof.

(g) Status of Converted Series X Preferred Stock. If any shares of Series X Preferred Stock shall be converted or repurchased or otherwise be acquired by the Corporation, or cash settled pursuant to Section 6(d)(iii) hereof, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series X Preferred Stock.

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**IN WITNESS WHEREOF**, the undersigned has executed this Certificate of Designation this 28th day of January, 2021.

/s/ JILL C. MILNE

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By: Jill C. Milne

Title: President and CEO

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ANNEX A

NOTICE OF CONVERSION  
(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER TO CONVERT SHARES  
OF SERIES X PREFERRED STOCK)

The undersigned Holder hereby irrevocably elects to convert the number of shares of Series X Preferred Stock indicated below, [represented by stock certificate No(s). [•]] [represented in book-entry form], into shares of common stock, par value \$0.001 per share (the "**Common Stock**"), of Catabasis Pharmaceuticals, Inc., a Delaware corporation (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 X Convertible Preferred Stock (the "**Certificate of Designation**") filed by the Corporation with the Secretary of State of the State of Delaware on January 28, 2021.

As of the date hereof, the number of shares of Common Stock beneficially owned by the undersigned Holder (together with such Holder's Affiliates, and any other Person whose beneficial ownership of Common Stock would be aggregated with the 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**")), including the number of shares of Common Stock issuable upon conversion of the Series X Preferred Stock subject to this Notice of Conversion, but excluding the number of shares of Common Stock which are issuable upon (A) conversion of the remaining, unconverted Series X 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 in Section 6(c) of the Certificate of Designation, is [•] %. For purposes hereof, 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.

**Conversion calculations:**

Date to Effect Conversion: \_\_\_\_\_  
Number of shares of Series X Preferred Stock owned prior to Conversion: \_\_\_\_\_  
Number of shares of Series X Preferred Stock to be Converted: \_\_\_\_\_  
Number of shares of Common Stock to be Issued: \_\_\_\_\_  
Address for delivery of physical certificates: \_\_\_\_\_

or

\_\_\_\_\_



for DWAC Delivery:

DWAC Instructions:

Broker no:

Account no:

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HOLDER

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

Name:

Title:

Date:

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## STOCK PURCHASE AGREEMENT

This Stock Purchase Agreement (this “Agreement”) is dated as of January 28, 2021, by and among Catabasis Pharmaceuticals, Inc., a Delaware corporation (the “Company”), and each purchaser identified on Annex A hereto (each, including its successors and assigns, a “Purchaser” and collectively, the “Purchasers”).

## BACKGROUND:

A. The Company and each Purchaser is executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act (as defined below), and Rule 506 of Regulation D (“Regulation D”) as promulgated by the United States Securities and Exchange Commission (the “Commission”) under the Securities Act.

B. The Purchasers, severally and not jointly, wish to purchase, and the Company wishes to issue and sell, upon the terms and conditions stated in this Agreement, an aggregate of 35,573 shares (the “Shares”) of Series X Convertible Preferred Stock, par value \$0.001 per share (the “Series X Preferred Stock”), of the Company, having the designation, preferences, conversion or other rights, voting powers, restrictions, limitations as to dividends, qualifications and terms and conditions as specified in the Certificate of Designation, substantially in the form attached hereto as Exhibit A (the “Certificate of Designation”), which will be convertible into shares (the “Conversion Shares”) of the Company’s common stock, par value \$0.001 per share (“Common Stock”), in accordance with the terms set forth in the Certificate of Designation.

C. Pursuant to the terms and conditions of the Certificate of Designation, the conversion of the Series X Preferred Stock shall be subject to receipt of the Requisite Stockholder Approval (as defined therein).

D. The Company has engaged Jefferies LLC as its exclusive placement agent (the “Placement Agent”) for the offering of the Shares on a “best efforts” basis.

E. Prior to the Closing (as defined below): (i) the parties hereto shall execute and deliver a Registration Rights Agreement, substantially in the form attached hereto as Exhibit B (the “Registration Rights Agreement”), pursuant to which, among other things, the Company will agree to provide certain registration rights with respect to the Conversion Shares under the Securities Act and the rules and regulations promulgated thereunder and applicable state securities laws and (ii) the Company shall file with the Delaware Secretary of State the Certificate of Designation, duly executed by an officer of the Company.

F. Concurrently with the execution and delivery of this Agreement, the Company is entering into an Agreement and Plan of Merger by and among the Company, Cabo Merger Sub I, Inc., Cabo Merger Sub II, LLC, and Quellis Biosciences, Inc. (“Quellis”), in substantially the form attached hereto as Exhibit D (the “Merger Agreement”), pursuant to which Quellis will become a wholly-owned subsidiary of the Company by way of merger (the “Merger”).

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, severally and not jointly, hereby agree as follows:

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**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 shall have the meanings indicated in this Section 1.1:

“Affiliate” means, with respect to any Person, any other Person that, directly or indirectly through one or more intermediaries, Controls, is controlled by or is under common control with such Person, as such terms are used in and construed under Rule 405 under the Securities Act. With respect to a Purchaser, any investment fund or managed account that is managed on a discretionary basis by the same investment manager as such Purchaser will be deemed to be an Affiliate of such Purchaser.

“Board of Directors” means the board of directors of the Company.

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

“Closing Date” means the Trading Day when all of the Transaction Documents have been executed and delivered by the applicable parties thereto, and all of the conditions set forth in Sections 2.1, 2.2, 5.1 and 5.2 hereof are satisfied or waived, as the case may be, or such other date as the parties may agree.

“Company Counsel” means Wilmer Cutler Pickering Hale and Dorr LLP.

“Company’s Knowledge” means with respect to any statement made to the Company’s Knowledge, that the statement is based upon the actual knowledge, or the knowledge that would have been acquired after reasonable investigation, of the executive officers of the Company having responsibility for the matter or matters that are the subject of the statement. With respect to any matters relating to intellectual property, such awareness or reasonable expectation to have knowledge does not require any such individual to conduct or have conducted or obtain or have obtained any freedom to operate opinions of counsel or any intellectual property rights clearance searches.

“Contract” means, with respect to any Person, any written agreement, contract, subcontract, lease (whether for real or personal property), mortgage, license, or other legally binding commitment or undertaking of any nature to which such Person is a party or by which such Person or any of its assets are bound or affected under applicable Law.

“Control” (including the terms “controlling”, “controlled by” or “under common control with”) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

“Effect” means any effect, change, event, circumstance or development.

“Effective Date” means the date on which the initial Registration Statement required by Section 2(a) of the Registration Rights Agreement is first declared effective by the Commission.

“Employee Plan” means any Employee Plan that the Company or any of its Subsidiaries (i) sponsors, maintains, administers, or contributes to, or (ii) provides benefits under or through, or (iii) has any obligation to contribute to or provide benefits under or through, or (iv) with respect to which have any liability, or (v) utilizes to provide benefits to or otherwise cover any current or former employee, officer, director or other service provider of the Company or any of its Subsidiaries (or their spouses, dependents, or beneficiaries).

“Encumbrance” means any lien, pledge, hypothecation, charge, mortgage, security interest, lease, exclusive license, option, easement, reservation, servitude, adverse title, claim, infringement, interference, option, right of first refusal, preemptive right, community property interest or restriction or encumbrance of any nature (including any restriction on the voting of any security, any restriction on the transfer of any security or other asset, any restriction on the receipt of any income derived from any asset, any restriction on the use of any asset and any restriction on the possession, exercise or transfer of any other attribute of ownership of any asset).

“Exchange Act” means the Securities Exchange Act of 1934, as amended, or any successor statute, and the rules and regulations promulgated thereunder.

“GAAP” means United States generally accepted accounting principles.

“Governmental Authority” means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature, (b) federal, state, local, municipal, foreign, supra-national or other government, (c) governmental or quasi-governmental authority of any nature (including any governmental division, department, agency, commission, bureau, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or entity and any court or other tribunal, and for the avoidance of doubt, any taxing authority) or (d) self-regulatory organization (including Nasdaq).

“Law” means any federal, state, national, supra-national, foreign, local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, regulation, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Authority (including under the authority of Nasdaq or the Financial Industry Regulatory Authority).

“Material Adverse Effect” means any Effect, individually or together with any other Effect, that has had, has, or would reasonably be expected to have a material adverse effect on the business, financial condition, assets, liabilities or results of operations of the Company or its subsidiaries, taken as a whole; provided, however, that Effects arising or resulting from the following shall not be taken into account in determining whether there has been a Material Adverse Effect: (a) the announcement or disclosure of the sale of the Shares or other transactions contemplated by this Agreement and the Merger Agreement, (b) the taking of any action, or the failure to take any action, by the Company that is required to comply with the terms of this Agreement and the Merger Agreement, (c) any natural disaster or epidemics, pandemics (including the COVID-19 virus) or other force majeure events, or any act or threat of terrorism or war, any armed hostilities or terrorist activities (including any escalation or general worsening of any of the foregoing) anywhere in the world or any governmental or other response or reaction to any of the foregoing, (d) any change in GAAP or applicable Law or the interpretation thereof or (e) general economic or political conditions or conditions generally affecting the industries in which the Company and its subsidiaries operate; except in each case with respect to clauses (c), (d) and (e), to the extent disproportionately affecting the Company and its subsidiaries, taken as a whole, relative to other similarly situated companies in the industries in which the Company and its subsidiaries operate.

“Nasdaq” means The Nasdaq Stock Market.

“New York Courts” means the state and federal courts sitting in the City of New York, Borough of Manhattan.

“Outside Date” means the thirtieth day following the date of this Agreement.

“Permitted Encumbrances” means (i) Encumbrances for current taxes and assessments not yet past due or the amount or validity of which is being contested in good faith by appropriate proceedings, (ii) mechanics’, workmen’s, repairmen’s, warehousemen’s and carriers’ Encumbrances arising in the ordinary course of business of the Company consistent with past practice, (iii) non-exclusive licenses of intellectual property rights granted by the Company or any of its Subsidiaries in the ordinary course of business and that do not (in any case or in the aggregate) materially detract from the value of the intellectual property rights subject thereto, and (iv) any such matters of record, Encumbrances and other imperfections of title that do not, individually or in the aggregate, materially impair the continued ownership, use and operation of the assets to which they relate in the business of the Company as currently conducted.

“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.

“Principal Trading Market” means the Trading Market on which the Common Stock is primarily listed on and quoted for trading, which, as of the date of this Agreement and the Closing Date, shall be the Nasdaq Global Market.

“Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“Registrable Securities” has the meaning set forth in the Registration Rights Agreement.

“Registration Statement” means a registration statement meeting the requirements set forth in the Registration Rights Agreement and covering the resale by the Purchasers of the Registrable Securities.

“Reporting Period” means the period commencing on the Closing Date and ending with respect to each Purchaser on the earliest of: (i) the date as of which such Purchaser may sell all of the Shares purchased hereunder (or the corresponding underlying Conversion Shares) under Rule 144 without volume or manner-of-sale restrictions and without the requirement for the Company to be in compliance with the current public information requirements under Rule 144(c)(1) (or any successor thereto) promulgated under the Securities Act; (ii) the second anniversary of the Closing Date, or (iii) the date on which such Purchaser shall have sold all of the Shares purchased hereunder (or the corresponding underlying Conversion Shares).

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

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Series X Preferred Stock” has the meaning set forth in the Recitals, and also includes any other class of securities into which the Series X Preferred Stock may hereafter be reclassified or changed into.

“Short Sales” include, without limitation, (i) all “short sales” as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, whether or not against the box, and all types of direct and indirect stock pledges, forward sale contracts, options, puts, calls, short sales, swaps, “put equivalent positions” (as defined in Rule 16a-1(h) under the Exchange Act) and similar arrangements (including on a total return basis), and (ii) sales and other transactions through non-U.S. broker dealers or non-U.S. regulated brokers (but shall not be deemed to include the location and/or reservation of borrowable shares of Common Stock).

“Subscription Amount” means, with respect to each Purchaser, the aggregate amount to be paid for the Shares purchased hereunder as indicated on Annex A opposite such Purchaser’s name, in United States dollars and in immediately available funds.

“Subsidiary” means any subsidiary of the Company, and shall, where applicable, include any subsidiary of the Company formed or acquired after the date hereof, including, for avoidance of doubt, Quellis.

“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).

“Transaction Documents” means this Agreement, the schedules and exhibits attached hereto, the Registration Rights Agreement and any other documents or agreements explicitly contemplated hereunder.

“Transfer Agent” means American Stock Transfer & Trust Company, LLC, the current transfer agent of the Company, or any successor transfer agent for the Company.

## ARTICLE II PURCHASE AND SALE

2.1 Purchase and Sale. On the Closing Date, upon the terms and subject to the conditions set forth herein, the Company will issue and sell to each Purchaser, and each Purchaser will purchase, severally and not jointly, the number of Shares set forth opposite the name of such Purchaser under the heading “Number of Shares Purchased” on Annex A attached hereto at a price of \$3,092.53 per Share, for an aggregate purchase price to be paid by all Purchasers of \$110,010,569.69 (the “Purchase Price”).

### 2.2 Closing.

(a) Closing. Upon the satisfaction of the conditions set forth in Article V, the closing of the purchase and sale of the Shares (the “Closing”) shall take place remotely via exchange of executed documents and funds on the third Business Day after the date hereof, or at such other time and place as the Company may designate by notice (which notice may be communicated through the Placement Agent) to the Purchasers.

(b) Payment. On or prior to the Closing Date, each Purchaser shall deliver to the Company the Subscription Amount via wire transfer of immediately available funds to an account designated in writing by the Company or by other means approved by the Company on or prior to the Closing Date. At the Closing, following the receipt by the Company of the entire portion of the Subscription Amount payable by a Purchaser, the Company shall issue to such Purchaser book entry shares (or certificates if requested by such Purchaser) representing the number of Shares set forth opposite such Purchaser’s name on Annex A, registered in the name of such Purchaser.

### 2.3 Closing Deliverables.

(a) On or prior to the Closing, the Company shall issue, deliver or cause to be delivered to each Purchaser the following (the “Company Deliverables”):

- (i) this Agreement, duly executed by the Company;
- (ii) the Registration Rights Agreement, duly executed by the Company;

(iii) evidence of the issuance of the Shares in the name of the Purchasers by book entry on the stock ledger of the Company (or, if the Shares are to be represented in certificated form, a certificate representing the Shares in the name of such Purchaser as set forth on the Stock Certificate Questionnaire included as Exhibit C hereto (the “Stock Certificate”));

(iv) a legal opinion of Company Counsel, dated as of the Closing Date and in form and substance reasonably satisfactory to the Purchasers, executed by such counsel and addressed to the Purchasers; and

(v) evidence of filing of the Certificate of Designations with the Secretary of State of the State of Delaware.

(b) On or prior to the Closing, each Purchaser shall deliver or cause to be delivered to the Company the following (the “Purchaser Deliverables”):

(i) this Agreement, duly executed by such Purchaser;

(ii) the Registration Rights Agreement, duly executed by such Purchaser;

(iii) its Subscription Amount, in United States dollars and in immediately available funds, in the amount set forth in the “Subscription Amount” column opposite each Purchaser’s name in the table set forth on Annex A by wire transfer to the Company;

(iv) a fully completed and duly executed Selling Stockholder Questionnaire in the form attached as Exhibit B to the Registration Rights Agreement; and

(v) a fully completed and duly executed Stock Certificate Questionnaire in the form attached hereto as Exhibit C if such Purchaser has requested Stock Certificates.

### **ARTICLE III REPRESENTATIONS AND WARRANTIES**

3.1 Representations and Warranties of the Company. Except as previously disclosed in the SEC Reports (as defined below), the Company hereby represents and warrants the following as of the date hereof and the Closing Date (except for the representations and warranties that speak as of a specific date, which shall be made as of such date) to each of the Purchasers and the Placement Agent:

(a) Due Organization; Subsidiaries. The Company is a Delaware corporation duly incorporated, validly existing and in good standing under the Laws of the jurisdiction of its incorporation and has all necessary corporate power and authority: (i) to conduct its business in the manner in which its business is currently being conducted, (ii) to own or lease and use its property and assets in the manner in which its property and assets are currently owned or leased and used and (iii) to perform its obligations under all Contracts by which it is bound. All of the Company’s Subsidiaries are wholly owned by the Company. Each of the Company and its Subsidiaries is licensed and qualified to do business, and is in good standing (to the extent applicable in such jurisdiction), under the Laws of all jurisdictions where the nature of its business in the manner in which its business is currently being conducted requires such licensing or qualification other than in jurisdictions where the failure to be so qualified individually or in the aggregate would not be reasonably expected to have a Material Adverse Effect.



(b) Authorization; Enforcement; Validity. The Company has the requisite corporate power and authority to enter into this Agreement and the other Transaction Documents and, subject to receipt of the Requisite Stockholder Approval, to consummate the transactions contemplated hereby or thereby. Subject to the receipt of the Requisite Stockholder Approval, all corporate action on the part of the Company, its directors and stockholders necessary for the authorization, execution, sale, issuance and delivery of the Shares and the Conversion Shares contemplated herein has been taken. Each of the Transaction Documents to which the Company is a party have been (or upon delivery will have been) duly executed and delivered by the Company and is, or when delivered in accordance with the terms hereof or thereof, will constitute the legal, valid and binding obligation of the Company enforceable against the Company in accordance with its respective terms, except (i) as such enforceability may be limited by applicable bankruptcy, examinership, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally the enforcement of, creditors' rights and remedies or by other equitable principles of general application, (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.

(c) No Conflicts. The execution, delivery and performance by the Company of the Transaction Documents to which it is a party and the issuance, sale and delivery of the Shares to be sold by the Company under the Transaction Documents (including, subject to the Company obtaining Requisite Stockholder Approval, the issuance of Conversion Shares upon the conversion of the Shares), the performance by the Company of its obligations under this Agreement and the other Transaction Documents and the consummation of the transactions contemplated hereby or thereby (including without limitation, the issuance of the Shares and the reservation for issuance of the Conversion Shares) do not and will not conflict with, result in the breach or violation of, or constitute (with or without the giving of notice or the passage of time or both) a violation of, or default under, (i) any bond, debenture, note or other evidence of indebtedness, or under any lease, license, franchise, permit, indenture, mortgage, deed of trust, loan agreement, joint venture or other agreement or instrument to which the Company or any of its Subsidiaries is a party or by which it or its properties may be bound or affected, (ii) the Company's restated certificate of incorporation, as amended and as in effect on the date hereof (the "Certificate of Incorporation"), the Company's bylaws, as amended and as in effect on the date hereof (the "Bylaws"), or the equivalent document with respect to any of the Company's Subsidiaries, as amended and as in effect on the date hereof, or (iii) subject to the Requisite Stockholder Approval, any statute or law, judgment, decree, rule, regulation, ordinance or order of any court or governmental or regulatory body (including Nasdaq), Governmental Authority applicable to the Company, any of its Subsidiaries or their respective properties, except in the case of clauses (i) and (iii) for such conflicts, breaches, violations or defaults that would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(d) Filings, Consents and Approvals. Except for any Current Report on Form 8-K, Notice of Exempt Offering of Securities on Form D to be filed by the Company in connection with the transaction contemplated hereby, any required filing with Nasdaq and the Requisite Stockholder Approval, the filing of the Certificate of Designation and the Registration Statement required to be filed by the Registration Rights Agreement, neither the Company nor any of its Subsidiaries is required to give any notice to, or make any filings with, or obtain any authorization, consent, or approval of any government or governmental agency in order to consummate the transactions contemplated by the Transaction Documents. Assuming the accuracy of the representations of the Purchasers in Section 3.2, no consent, approval, authorization or other order of, or registration, qualification or filing with, any Governmental Authority is required for the execution and delivery of the Transaction Documents, the valid issuance, sale and delivery of the Shares to be sold pursuant to the Transaction Documents (including, subject to the Company obtaining the Requisite Stockholder Approval, the issuance of Conversion Shares upon conversion of the Shares) other than such as have been or will be made or obtained, or for any securities filings required to be made under federal or state securities laws applicable to the offering of the Shares or the issuance of Conversion Shares upon conversion of the Shares (other than the Requisite Stockholder Approval and filings that have been made, or will be made, pursuant to the rules and regulations of Nasdaq). The Company and its Subsidiaries are unaware of any facts or circumstances that might prevent the Company from obtaining or effecting any of the registration, application or filings pursuant to this Section 3.1(d).

(e) Issuance of the Shares. The issuance of the Shares has been duly authorized and the Shares, when issued and paid for in accordance with the terms of this Agreement, will be duly and validly issued, fully paid and nonassessable and free and clear of any Encumbrances, preemptive rights or restrictions (other than as provided in this Agreement or any restrictions on transfer generally imposed under applicable securities laws). Subject to receipt of the Requisite Stockholder Approval, the Conversion Shares, when issued in accordance with the terms of the Certificate of Designation, will be duly authorized, validly issued, fully paid and non-assessable, and shall be free and clear of any encumbrances, preemptive rights or restrictions (other than as provided in this Agreement or any restrictions on transfer generally imposed under applicable securities laws). The Company shall have reserved such number of shares of Common Stock sufficient to enable the full conversion of all of the Shares, subject to receiving the Requisite Stockholder Approval.

(f) Capitalization.

(i) As of January 28, 2021 (the "Capitalization Date"), before giving effect to the Merger and the issuance of the Shares, the authorized capital stock of the Company consisted of (x) 5,000,000 shares of preferred stock, par value \$0.001 per share (the "Preferred Stock"), 91,380 of which were designated as Series X Preferred Stock, none of which were issued and outstanding and convertible into shares of Common Stock, and (y) 150,000,000 shares of Common Stock, 20,084,337 shares of which were issued and outstanding. The Preferred Stock and the Common Stock are collectively referred to herein as the "Capital Stock." All of the issued and outstanding shares of Capital Stock have been duly authorized and validly issued, and are fully paid and nonassessable and are free of any Encumbrances. As of the Capitalization Date, before giving effect to the Merger, the Company has 1,332,726 shares of Common Stock reserved for issuance upon the exercise of outstanding options and 6,193,749 shares of Common Stock reserved for issuance upon the exercise of outstanding warrants.

(ii) Schedule 3.1(f) sets forth the pro forma capitalization of the Company (on a treasury stock method basis) immediately following the Merger and assuming the issuance of all Shares offered hereby.

(iii) None of the outstanding shares of Capital Stock or outstanding options or warrants to purchase Capital Stock of the Company were issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. Except as otherwise set forth in this Agreement or in the Merger Agreement, as of the date hereof there are no outstanding options, warrants, rights (including conversion or preemptive rights), agreements, arrangements or commitments of any character, whether or not contingent, relating to the issued or unissued Capital Stock of the Company or obligating the Company to issue or sell any share of Capital Stock of, or other equity interest in, the Company. Neither the issuance and sale of the Shares nor the issuance of the Conversion Shares will obligate the Company to issue shares of Common Stock or other securities to any Person (other than the Purchasers) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under any of such securities.

(iv) Effective as of the consummation of the Merger, Quellis will be a wholly-owned subsidiary of the Company.

(g) SEC Reports; Disclosure Materials. The Company has filed or furnished, as applicable, on a timely basis all forms, statements, certifications, reports and documents required to be filed or furnished by it with the Commission under the Exchange Act or the Securities Act since January 1, 2020 (the "SEC Reports"). As of the time it was filed with the Commission (or, if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing), each of the SEC Reports complied in all material respects with the applicable requirements of the Securities Act or the Exchange Act (as the case may be) and as of the time they were filed, none of the SEC Reports 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.

(h) Financial Statements. As of their respective filing dates, the financial statements (including any related notes) contained or incorporated by reference in the SEC Reports (i) complied as to form in all material respects with the Securities Act and the Exchange Act, as applicable, (ii) were prepared in accordance with GAAP (except as may be indicated in the notes to such financial statements or, in the case of unaudited financial statements, as permitted by Form 10-Q of the Commission, and except that the unaudited financial statements may not contain footnotes and are subject to normal and recurring year-end adjustments that are not reasonably expected to be material in amount) applied on a consistent basis unless otherwise noted therein throughout the periods indicated and (iii) fairly present, in all material respects, the consolidated financial position of the Company as of the respective dates thereof and the results of operations and cash flows of the Company for the periods covered thereby. Other than as expressly disclosed in the SEC Reports filed prior to the date hereof, there has been no material change in the Company's accounting methods or principles that would be required to be disclosed in the Company's financial statements in accordance with GAAP. Except as set forth in the consolidated financial statements of the Company included in the SEC Reports filed prior to the date hereof, the Company has not incurred any liabilities, contingent or otherwise, except those incurred in the ordinary course of business, consistent (as to amount and nature) with past practices since the date of such financial statements, none of which, individually or in the aggregate, have had or would reasonably be expected to have a Material Adverse Effect. The books of account and other financial records of the Company and each of its Subsidiaries are true and complete in all material respects.

(i) Independent Accountants. Ernst & Young LLP, who have certified certain financial statements of the Company and delivered their report with respect to the audited financial statements included in the SEC Reports, has at all times since September 2010, the date of their engagement by the Company, been (i) a registered public accounting firm (as defined in Section 2(a)(12) of the Sarbanes-Oxley Act), (ii) to the Company's Knowledge, "independent" with respect to the Company within the meaning of Regulation S-X under the Exchange Act and (iii) to the Company's Knowledge, in compliance with subsections (g) through (l) of Section 10A of the Exchange Act and the rules and regulations promulgated by the Commission and the Public Accounting Oversight Board thereunder.

(j) Absence of Certain Changes. Since September 30, 2020, except as set forth in the SEC Reports and the consummation of the transactions contemplated by the Merger Agreement and this Agreement, there has been no material adverse change to, and no material adverse development in, the business, properties, operations, condition (financial or otherwise), results of operations or prospects of the Company or its Subsidiaries. Except in connection with the execution of the Merger Agreement and the consummation of the transactions contemplated thereby, since September 30, 2020, neither the Company nor any of its Subsidiaries has (i) declared or paid any dividends, (ii) sold any material assets, individually or in the aggregate, outside of the ordinary course of business or (iii) had material capital expenditures, individually or in the aggregate, outside of the ordinary course of business. Neither the Company nor any of its Subsidiaries has taken any steps to seek protection pursuant to any bankruptcy law nor does the Company have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy proceedings or any actual knowledge of any fact that would reasonably lead any such creditor to do so. The Company and its Subsidiaries, individually and on a consolidated basis, after giving effect to the transactions contemplated hereby to occur at the Closing, will not be Insolvent (as defined below). For purposes of this Section 3.1(j), "Insolvent" means, with respect to any Person, (i) the present fair saleable value of such Person's assets is less than the amount required to pay such Person's total indebtedness, (ii) such Person is unable to pay its debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured, (iii) such Person intends to incur or believes that it will incur debts that would be beyond its ability to pay as such debts mature or (iv) such Person has unreasonably small capital with which to conduct the business in which it is engaged as such business is now conducted and is proposed to be conducted.

(k) Litigation. There is no action, suit, proceeding or investigation pending or, to the Company's Knowledge, currently threatened in writing against the Company or any of its directors and officers that questions the validity of the Transaction Documents or the right of the Company to enter into the Transaction Documents or to consummate the transactions contemplated hereby. There is no material action, suit, proceeding or investigation pending or, to the Company's Knowledge, currently threatened in writing against the Company or any Subsidiary or any of their respective directors and officers.

(l) Conduct of Business; Regulatory Permits. Neither the Company nor any of its Subsidiaries is in violation of any term of or in default under its Certificate of Incorporation, any certificate of designations of any outstanding series of preferred stock of the Company or the Bylaws or their organizational charter or bylaws, respectively. Neither the Company nor any of its Subsidiaries is in violation of any judgment, decree or order or any statute, ordinance, rule or regulation applicable to the Company or its Subsidiaries, and neither the Company nor any of its Subsidiaries will conduct its business in violation of any of the foregoing, except for possible violations which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Without limiting the generality of the foregoing, except as disclosed in the SEC Reports, the Company is not in violation of any of the rules, regulations or requirements of Nasdaq and has no knowledge of any facts or circumstances that would reasonably lead to delisting or suspension of the Common Stock by Nasdaq in the foreseeable future. The Company and its Subsidiaries possess all certificates, authorizations and permits issued by the appropriate regulatory authorities necessary to conduct their respective businesses as currently conducted, except where the failure to possess such certificates, authorizations or permits would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, and neither the Company nor any such Subsidiary has received any written notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit.

(m) Title to Assets. Each of the Company and its Subsidiaries owns, and has good and marketable title to, or, in the case of leased properties and assets, valid leasehold interests in, all tangible properties or tangible assets and equipment used or held for use in its business or operations or purported to be owned by it, including: (i) all tangible assets reflected on the financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the SEC Reports and (ii) all other tangible assets reflected in the books and records of the Company as being owned by the Company. All of such assets are owned or, in the case of leased assets, leased by the Company or any of its Subsidiaries free and clear of any Encumbrances, other than Permitted Encumbrances.

(n) Insurance. Each of the Company and its Subsidiaries are insured by recognized, financially sound and reputable institutions with policies in such amounts and with such deductibles and covering such risks as are generally deemed reasonable, adequate and customary for their businesses including, but not limited to, policies covering real and personal property owned or leased by the Company and its Subsidiaries against theft, damage, destruction, acts of vandalism and earthquakes and policies covering the Company and its subsidiaries for product liability claims and clinical trial liability claims. The Company has no reason to believe that it or any of its Subsidiaries will not be able to (i) renew its existing insurance coverage as and when such policies expire or (ii) obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that could not be expected to result in a Material Adverse Effect. Neither the Company nor any of its Subsidiaries has been denied any insurance coverage which it has sought or for which it has applied.

(o) Transactions with Affiliates and Employees. Except as set forth in the SEC Reports, since the date of the Company's last proxy statement filed in 2020 with the SEC, no event has occurred that would be required to be reported by the Company pursuant to Item 404 of Regulation S-K promulgated by the SEC.

(p) Internal Controls. The Company has established and maintains disclosure controls and procedures (as defined in Rules 13a-15 and 15d-15 under the 1934 Act), which (i) are designed to ensure that material information relating to the Company, including its subsidiaries, is made known to the Company's principal executive officer and its principal financial officer by others within those entities; (ii) have been evaluated by management of the Company for effectiveness as of the end of the Company's most recent fiscal quarter; and (iii) are effective in all material respects to perform the functions for which they were established. Since the end of the Company's most recent audited fiscal year, there have been no material weaknesses in the Company's internal control over financial reporting (whether or not remediated) and no change in the Company's internal control over financial reporting that has materially affected, or would reasonably be expected to materially affect, the Company's internal control over financial reporting. The Company is not aware of any change in its internal controls over financial reporting that has occurred during its most recent fiscal quarter that has materially affected, or would reasonably be expected to materially affect, the Company's internal control over financial reporting.

(q) Sarbanes-Oxley. The Company is in compliance in all material respects with the applicable provisions of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated thereunder.

(r) No Registration. Assuming the accuracy of the Purchasers' representations and warranties set forth in Section 3.2 of this Agreement, no registration under the Securities Act is required for the offer and sale of the Shares by the Company to the Purchasers as contemplated hereby.

(s) Certain Fees. No person or entity will have, as a result of the transactions contemplated by this Agreement, any valid right, interest or claim against or upon the Company or a Purchaser for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of the Company, other than the Placement Agent with respect to the offer and sale of the Shares (which placement agent fees are being paid by the Company). 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(s) that may be due in connection with the transactions contemplated by the Transaction Documents. The Company shall indemnify, pay, and hold each Purchaser harmless against, any liability, loss or expense (including, without limitation, attorneys' fees and out-of-pocket expenses) arising in connection with any such right, interest or claim.

(t) Company Not an “Investment Company.” The Company is not, and will not be, immediately after receipt of payment for the Shares, required to register as an “investment company” under the Investment Company Act of 1940, as amended.

(u) Registration Rights. Other than each of the Purchasers or as set forth in the SEC Reports, no Person has any right to cause the Company to effect the registration under the Securities Act of any securities of the Company other than those securities which are currently registered on an effective registration statement on file with the Commission.

(v) Listing and Maintenance Requirements. The Company’s 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 terminate 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 or listing. The Company is in compliance with all applicable listing requirements of the Principal Trading Market.

(w) Disclosure. The Company confirms that it has not provided, and to the Company’s Knowledge, none of its officers or directors nor any other Person acting on its or their behalf has provided, and it has not authorized the Placement Agent to provide, any Purchaser or its respective agents or counsel with any information that it believes constitutes material, non-public information except insofar as the existence, provisions and terms of the Transaction Documents and the proposed transactions hereunder may constitute such information, all of which will be disclosed by the Company in the Press Release as contemplated by Section 4.4 hereof. The Company understands and confirms that the Purchasers will rely on the foregoing representations in effecting transactions in securities of the Company.

(x) No Integrated Offering. Assuming the accuracy of the Purchasers’ representations and warranties set forth in Section 3.2, and except with respect to the Capital Stock to be issued pursuant to the Merger Agreement, none of the Company, its Subsidiaries nor, to the Company’s Knowledge, any of its Affiliates or any Person acting on its behalf has, directly or indirectly, at any time within the past six months, made any offers or sales of any Company security or solicited any offers to buy any security under circumstances that would (i) eliminate the availability of the exemption from registration under Regulation D under the Securities Act in connection with the offer and sale by the Company of the Shares as contemplated hereby or (ii) cause the offering of the Shares pursuant to the Transaction Documents to be integrated with prior offerings by the Company for purposes of any applicable law, regulation or stockholder approval provisions, including, without limitation, under the rules and regulations of any Trading Market on which any of the securities of the Company are listed or designated.

(y) Tax Matters. Each of the Company and each of its Subsidiaries has timely filed all income tax returns and all other material tax returns that were required to be filed by or with respect to it under applicable Law (taking into account any applicable extensions thereof). All such tax returns were correct and complete in all material respects and have been prepared in material compliance with all applicable Law. Subject to exceptions as would not be material, no claim has ever been made by a Governmental Authority in a jurisdiction where the Company or any of its Subsidiaries does not file tax returns that the Company or any of its Subsidiaries is subject to taxation by that jurisdiction. All material amounts of taxes due and owing by the Company and each of its Subsidiaries (whether or not shown on any tax return) have been timely paid. Since the date of the most recent financial statements (including the related notes and schedules thereto) included (or incorporated by reference) in the SEC Reports, neither the Company nor any of its Subsidiaries has incurred any material liability for taxes outside the ordinary course of business consistent with past practice.

(z) No General Solicitation. Neither the Company nor, to the Company's Knowledge, any person acting on behalf of the Company has offered or sold any of the Shares by any form of general solicitation or general advertising.

(aa) Anti-Corruption and Anti-Bribery Laws. Neither the Company nor any of its Subsidiaries nor any director, officer, or employee of the Company or any of its Subsidiaries, nor to the Company's Knowledge, any agent, Affiliate or other person acting on behalf of the Company or any of its subsidiaries has, in the course of its actions for, or on behalf of, the Company or any of its subsidiaries (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; (ii) made or taken any act in furtherance of an offer, promise, or authorization of any direct or indirect unlawful payment or benefit to any non-U.S. or domestic government official or employee, including of any government-owned or controlled entity or public international organization, or any political party, party official, or candidate for political office; (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"), the UK Bribery Act 2010, or any other applicable anti-bribery or anti-corruption law; or (iv) made, offered, authorized, requested, or taken an act in furtherance of any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment or benefit. The Company and its Subsidiaries and, to the Company's Knowledge, the Company's Affiliates have conducted their respective businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(bb) Money Laundering Laws. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the USA Patriot Act, the Bank Secrecy Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Money Laundering Laws"); and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator or non-governmental authority involving the Company or its subsidiaries with respect to the Money Laundering Laws is pending or, to the Company's Knowledge, threatened.

(cc) OFAC. Neither the Company nor its subsidiaries nor any of their respective affiliates, directors, officers, nor to the Company's Knowledge, any agent or employee of the Company or its subsidiaries is subject to any sanctions administered or enforced by the Office of Foreign Assets Control ("OFAC") of the United States Treasury Department, the U.S. Department of State, the United Nations Security Council, the European Union, Her Majesty's Treasury or any other relevant sanctions authority; and the Company will not directly or indirectly use the proceeds of the offering of the Shares contemplated hereby, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity for the purpose of financing the activities of any person that is the target of sanctions administered or enforced by such authorities or in connection with any country or territory that is the target of country- or territory-wide OFAC sanctions (currently, Iran, Syria, Cuba, North Korea, and the Crimea Region of Ukraine).



(dd) Off Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company (or any Subsidiary) and an unconsolidated or other off balance sheet entity that is required to be disclosed by the Company in SEC Reports and is not so disclosed and would have or reasonably be expected to result in a Material Adverse Effect.

(ee) Acknowledgment Regarding Purchaser's Purchase of Securities. The Company acknowledges and agrees that each Purchaser is acting solely in the capacity of an arm's length purchaser with respect to this Agreement and the other Transaction Documents and the transactions contemplated hereby and thereby, and that the obligations of each Purchaser under this Agreement and the other Transaction Documents are several and not joint. The Company further acknowledges that no Purchaser is acting as a financial advisor or fiduciary of the Company or any of its Subsidiaries (or in any similar capacity) with respect to this Agreement and the other Transaction Documents and the transactions contemplated hereby and thereby, and any advice given by a Purchaser or any of its representatives or agents in connection with this Agreement and the other Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to such Purchaser's purchase of the Shares. The Company further represents to each Purchaser that the Company's decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Company and its representatives.

(ff) No Price Stabilization or Manipulation; Compliance with Regulation M. Neither the Company nor any of its Subsidiaries has taken, directly or indirectly, any action designed to or that might cause or result in stabilization or manipulation of the price of the any security of the Company to facilitate the sale or resale of the Shares or otherwise, and has taken no action which would directly or indirectly violate Regulation M under the Exchange Act.

(gg) Clinical Data and Regulatory Compliance. The preclinical tests and clinical trials, and other studies (collectively, "studies") that are described in, or the results of which are referred to in, the SEC Reports were conducted in all material respects in accordance with the protocols, procedures and controls designed and approved for such studies and with standard medical and scientific research procedures; each description of the results of such studies is accurate and complete in all material respects and fairly presents the data derived from such studies; the Company and its Subsidiaries have made all such filings and obtained all such approvals as may be required by the Food and Drug Administration of the U.S. Department of Health and Human Services or any committee thereof or from any other U.S. or non-U.S. government or drug or medical device regulatory agency, or health care facility Institutional Review Board (collectively, the "Regulatory Agencies"); neither the Company nor any of its Subsidiaries has received any notice of, or correspondence from, any Regulatory Agency requiring the termination, suspension or modification of any clinical trials that are described or referred to in the SEC Reports; and the Company and its Subsidiaries have each operated and currently are in compliance in all material respects with all applicable rules, regulations and policies of the Regulatory Agencies.

(hh) No Additional Agreements. The Company does not have any agreement or understanding with any Purchaser with respect to the transactions contemplated by the Transaction Documents other than as specified in the Transaction Documents.

(ii) No Disqualification Events. No “bad actor” disqualifying event described in Rule 506(d)(1)(i)-(viii) of the Securities Act (a “Disqualification Event”) is applicable to the Company or, to the Company’s Knowledge, any Covered Person (as defined below), except for a Disqualification Event as to which Rule 506(d)(2)(ii-iv) or (d)(3), is applicable. “Covered Person” means, with respect to the Company as an “issuer” for purposes of Rule 506 promulgated under the Securities Act, any person listed in the first paragraph of Rule 506(d)(1). Other than the Placement Agent, the Company is not aware of any Person (other than any Covered Person) that has been or will be paid (directly or indirectly) remuneration for solicitation of purchasers in connection with the sale of the Shares pursuant to this Agreement.

(jj) Shell Company Status. The Company is not, and has never been, an issuer identified in, or subject to, Rule 144(i)(1) of the Securities Act.

3.2 Representations and Warranties of the Purchasers. Each Purchaser hereby, for itself and for no other Purchaser, represents and warrants as of the date hereof and as of the Closing Date to each of the Company and the Placement Agent as follows:

(a) Organization; Authority. Such Purchaser is an entity duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization with the requisite corporate or partnership power and authority to enter into and to consummate the transactions contemplated by the applicable Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement by such Purchaser and performance by such Purchaser of the transactions contemplated by this Agreement have been duly authorized by all necessary corporate or, if such Purchaser is not a corporation, such partnership, limited liability company or other applicable like action, 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 as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally the enforcement of, creditors’ rights and remedies or by other equitable principles of general application.

(b) No Conflicts. The execution, delivery and performance by such Purchaser of this Agreement and the Registration Rights Agreement and the consummation by such Purchaser of the transactions contemplated hereby and thereby will not (i) result in a violation of the organizational documents of such Purchaser or (ii) result in a violation of any law, rule, regulation, order, judgment or decree (including U.S. federal and state securities laws) applicable to such Purchaser, except in the case of clause (ii) above, for such conflicts, defaults, rights or violations which would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the ability of such Purchaser to perform its obligations hereunder.

(c) Investment Intent.

(i) Such Purchaser understands that the Shares and the Conversion Shares (collectively, the “Securities”) are “restricted securities” and have not been registered under the Securities Act or any applicable U.S. 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 U.S. state or other securities laws, *provided, however*, that by making the representations herein, such Purchaser does not agree to hold any of the Securities for any minimum period of time and reserves the right, subject to the provisions of this Agreement and the Registration Rights Agreement, at all times to sell or otherwise dispose of all or any part of such Securities pursuant to an effective registration statement under the Securities Act or under an exemption from such registration and in compliance with applicable U.S. federal, state and other securities laws. Such Purchaser is acquiring the Securities hereunder in the ordinary course of its business.

(ii) Such Purchaser does not presently have any agreement, plan or understanding, directly or indirectly, with any Person to distribute or effect any distribution of any of the Securities (or any securities which are derivatives thereof) to or through any person or entity; such Purchaser is not a registered broker-dealer under Section 15 of the Exchange Act or an entity engaged in a business that would require it to be so registered as a broker-dealer.

(d) Purchaser Status. At the time such Purchaser was offered the Shares, it was, and at the date hereof it is, and at the Closing will be, an “accredited investor” as defined in Rule 501(a) under the Securities Act.

(e) General Solicitation. Such Purchaser is not purchasing the Shares as a result of any advertisement, article, notice or other communication regarding the Shares published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or any other general advertisement.

(f) Purchaser Sophistication. 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. Such Purchaser further acknowledges that there is no trading market for the Shares and that the Company’s ability to issue the Conversion Shares is subject to receipt of Requisite Stockholder Approval.

(g) Access to Information. Such Purchaser acknowledges that it has had the opportunity to review 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 Shares and the merits and risks of investing in the Shares; (ii) access to information about the Company and the Subsidiaries 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 possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment. Neither such inquiries nor any other investigation conducted by or on behalf of such Purchaser or its representatives or counsel shall modify, amend or affect such Purchaser’s right to rely on the truth, accuracy and completeness of the SEC Reports and the Company’s representations and warranties contained in the Transaction Documents.

(h) Certain Trading Activities. Other than with respect to the transactions contemplated herein, since the time that such Purchaser was first contacted by the Company, a Placement Agent or any other Person regarding the transactions contemplated hereby, neither the Purchaser nor any Affiliate of such Purchaser which (x) had knowledge of the transactions contemplated hereby, (y) has or shares discretion relating to such Purchaser's investments or trading or information concerning such Purchaser's investments, including in respect of the Shares, and (z) is subject to such Purchaser's review or input concerning such Affiliate's investments or trading (collectively, "Trading Affiliates") has directly or indirectly, nor has any Person acting on behalf of or pursuant to any understanding with such Purchaser or Trading Affiliate, effected or agreed to effect any purchases or sales of the securities of the Company (including, without limitation, any Short Sales involving the Company's securities). Notwithstanding the foregoing, in the case of a Purchaser and/or Trading Affiliate that is, individually or collectively, a multi-managed investment bank or vehicle whereby separate portfolio managers manage separate portions of such Purchaser's or Trading Affiliate'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 or Trading Affiliate's assets, the representation set forth above shall apply only with respect to the portion of assets managed by the portfolio manager that have knowledge about the financing transaction contemplated by this Agreement. Other than to other Persons party to this Agreement, and to such Purchaser's representatives or agents, including, but not limited to, such Purchaser's legal, tax and investment advisors, 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 avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to the identification of the availability of, or securing of, available shares to borrow in order to effect Short Sales or similar transactions in the future.

(i) Brokers and Finders. Other than the Placement Agent, no Person will have, as a result of the transactions contemplated by this Agreement, any valid right, interest or claim against or upon the Company or any Purchaser for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of the Purchaser. No Purchaser shall have any obligation with respect to any fees, or with respect to any claims made by or on behalf of other Persons for fees, in each case of the type contemplated by this Section 3.2(i) that may be due in connection with the transactions contemplated by this Agreement or the Transaction Documents.

(j) Independent Investment Decision. Such Purchaser has independently evaluated the merits of its decision to purchase Securities pursuant to the Transaction Documents, and such Purchaser confirms that it has not relied on the advice of any other Purchaser's business and/or legal counsel in making such decision. Such Purchaser understands that nothing in this Agreement or any other materials presented by or on behalf of the Company to the Purchaser in connection with the purchase of the Shares constitutes legal, tax or investment advice. Such Purchaser has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of the Shares. Such Purchaser understands that the Placement Agent has acted solely as the agent of the Company in this placement of the Shares and such Purchaser has not relied on the business or legal advice of the Placement Agent or any of their agents, counsel or Affiliates in making its investment decision hereunder, and confirms that none of such Persons has made any representations or warranties to such Purchaser in connection with the transactions contemplated by the Transaction Documents.

(k) Reliance on Exemptions. Such Purchaser understands that the Shares being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Purchaser's compliance with, the representations, warranties, agreements, acknowledgements and understandings of such Purchaser set forth herein in order to determine the availability of such exemptions and the eligibility of such Purchaser to acquire the Shares.

(l) No Governmental Review. Such Purchaser understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Shares or the fairness or suitability of the investment in the Shares nor have such authorities passed upon or endorsed the merits of the offering of the Shares.

(m) Regulation M. Such Purchaser is aware that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of Securities and other activities with respect to the Shares by the Purchasers.

(n) Beneficial Ownership. The purchase by such Purchaser of the Shares issuable to it at the Closing will not result in such Purchaser (individually or together with any other Person with whom such Purchaser has identified, or will have identified, itself as part of a "group" in a public filing made with the Commission involving the Company's securities) acquiring, or obtaining the right to acquire, beneficial ownership in excess of 19.99% of the outstanding shares of Common Stock or the voting power of the Company on a post transaction basis that assumes that such Closing shall have occurred. Such Purchaser does not presently intend to, alone or together with others, make a public filing with the Commission to disclose that it has (or that it together with such other Persons have) acquired, or obtained the right to acquire, as a result of such Closing (when added to any other securities of the Company that it or they then own or have the right to acquire), beneficial ownership in excess of 19.99% of the outstanding shares of Common Stock or the voting power of the Company on a post transaction basis that assumes that each Closing shall have occurred.

(o) Residency. Such Purchaser's residence (if an individual) or offices in which its investment decision with respect to the Shares was made (if an entity) are located at the address immediately below such Purchaser's name on its signature page hereto.

The Company and each of the Purchasers acknowledge and agree that no party to this Agreement has made or makes any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in this Article III and the Transaction Documents.

**ARTICLE IV  
OTHER AGREEMENTS OF THE PARTIES**

4.1 Transfer Restrictions.

(a) Compliance with Laws. Notwithstanding any other provision of this Article IV, each Purchaser covenants that the Shares and Conversion Shares may be disposed of only pursuant to an effective registration statement under, and in compliance with the requirements of, 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 compliance with any applicable U.S. state and federal securities laws. In connection with any transfer of the Shares other than (i) pursuant to an effective registration statement, (ii) to the Company, (iii) pursuant to Rule 144 (*provided* that the Purchaser provides the Company with reasonable assurances (in the form of seller and, if applicable, broker representation letters) that the securities may be sold pursuant to such rule) or (iv) in connection with a bona fide 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 the Registration Rights Agreement and shall have the rights of a Purchaser under this Agreement and the Registration Rights Agreement with respect to such transferred Securities.

(b) Legends. Certificates and book-entry statements evidencing the Shares and any Conversion Shares shall bear, any legend as required by the “blue sky” laws of any state and a restrictive legend in substantially the following form:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE SECURITIES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER APPLICABLE SECURITIES LAWS, OR UNLESS OFFERED, SOLD, PLEDGED, HYPOTHECATED OR TRANSFERRED PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THOSE LAWS. THE COMPANY AND ITS TRANSFER AGENT SHALL BE ENTITLED TO REQUIRE AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY AND THE TRANSFER AGENT THAT SUCH REGISTRATION IS NOT REQUIRED.

The Company acknowledges and agrees that a Purchaser may from time to time pledge, and/or grant a security interest in, some or all of the legended Securities in connection with applicable securities laws, pursuant to a bona fide margin agreement in compliance with a bona fide margin loan. Such a pledge would not be subject to approval or consent of the Company and no legal opinion of legal counsel to the pledgee, secured party or pledgor shall be required in connection with the pledge, but such legal opinion shall be required in connection with a subsequent transfer or foreclosure following default by the Purchaser transferee of the pledge. No notice shall be required of such pledge, but Purchaser's transferee shall promptly notify the Company of any such subsequent transfer or foreclosure. Each Purchaser acknowledges that the Company shall not be responsible for any pledges relating to, or the grant of any security interest in, any of the Shares or for any agreement, understanding or arrangement between any Purchaser and its pledgee or secured party. 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 Shares, including the preparation and filing of any required prospectus supplement under Rule 424(b)(3) of the Securities Act or other applicable provision of the Securities Act to appropriately amend the list of selling stockholders thereunder. Each Purchaser acknowledges and agrees that, except as otherwise provided in [Section 4.1\(c\)](#), any Securities subject to a pledge or security interest as contemplated by this [Section 4.1\(b\)](#) shall continue to bear the legend set forth in this [Section 4.1\(b\)](#) and be subject to the restrictions on transfer set forth in [Section 4.1\(a\)](#).

(c) **Legend Removal.** The Company shall, at its sole expense, upon appropriate notice from any Purchaser stating that Registrable Securities have been sold pursuant to an effective Registration Statement, timely prepare and deliver certificates representing the Conversion Shares to be delivered to a transferee pursuant to the Registration Statement, which certificates shall be free of any restrictive legends and in such denominations and registered in such names as such Purchaser may request. Upon request of the Purchaser, and if such legend is no longer required under the Securities Act and applicable state securities laws, the Company shall promptly cause the legend to be removed from any certificate for any Conversion Shares in accordance with the terms of this Agreement and deliver, or cause to be delivered, to any Purchaser new certificate(s) representing the Conversion Shares that are free from all restrictive and other legends or, at the request of such Purchaser, via DWAC transfer to such Purchaser's account. A Purchaser may request that the Company remove, and the Company agrees to authorize the removal of, any legend from such Conversion Shares, upon the earliest of (x) such time as the Conversion Shares are subject to an effective registration statement covering the resale of such Conversion Shares and (y) following the delivery by a Purchaser to the Company or the Company's transfer agent of a legended certificate representing such Conversion Shares: (i) following any sale of such Conversion Shares pursuant to Rule 144, (ii) if such Conversion Shares are eligible for sale under Rule 144(b)(1) without the requirement for the Company to be in compliance with the current public information requirements under Rule 144(c)(1) (or any successor thereto), or (iii) following the time a legend is no longer required with respect to such Conversion Shares. Certificates for Conversion Shares free from all restrictive legends may be transmitted by the Company's transfer agent to the Purchasers by crediting the account of the Purchaser's prime broker with the Depository Trust Company ("**DTC**") as directed by such Purchaser. The Company warrants that the Conversion Shares shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement. If a Purchaser effects a transfer of the Conversion Shares in accordance with this [Section 4.1](#), the Company shall permit the transfer and shall promptly instruct its transfer agent to issue one or more certificates or credit shares to the applicable balance accounts at DTC in such name and in such denominations as specified by such Purchaser to effect such transfer. Additionally, if a Purchaser effects a conversion of the Shares into Conversion Shares at a time when a legend is not required with respect to the Conversion Shares, such Conversion Shares shall be issued without the restrictive legends set forth in [Section 4.1\(b\)](#). Each Purchaser hereby agrees that the removal of the restrictive legend pursuant to this [Section 4.1\(c\)](#) is predicated upon the Company's reliance that such Purchaser will sell any such Conversion Shares pursuant to either the registration requirements of the Securities Act, including any applicable prospectus delivery requirements, or an exemption therefrom.

(d) Acknowledgement. Each Purchaser hereunder acknowledges its primary responsibilities under the Securities Act and accordingly will not sell or otherwise transfer the Shares or Conversion Shares or any interest therein without complying with the requirements of the Securities Act. While the Registration Statement remains effective, each Purchaser hereunder may sell the Conversion Shares in accordance with the plan of distribution contained in the Registration Statement and if it does so it will comply therewith and with the related prospectus delivery requirements unless an exemption therefrom is available. Each Purchaser, severally and not jointly with the other Purchasers, agrees that if it is notified by the Company in writing at any time that the Registration Statement registering the resale of the Conversion Shares is not effective or that the prospectus included in such Registration Statement is no longer compliant with the requirements of Section 10 of the Securities Act, the Purchaser will refrain from selling such Conversion Shares until such time as the Purchaser is notified by the Company that such Registration Statement is effective or such prospectus is compliant with Section 10 of the Securities Act, unless such Purchaser is able to, and does, sell such Conversion Shares pursuant to an available exemption from the registration requirements of Section 5 of the Securities Act. Both the Company and its Transfer Agent, and their respective directors, officers, employees and agents, may rely on this Section 4.1(d) and each Purchaser hereunder will indemnify and hold harmless each of such persons from any breaches or violations of this Section 4.1(d).

4.2 Furnishing of Information. In order to enable the Purchasers to sell the Securities under Rule 144, during the Reporting Period, the Company shall use its commercially reasonable efforts 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. During the Reporting Period, if the Company is not required to file reports pursuant to the Exchange Act, it will prepare and furnish to the Purchasers and make publicly available in accordance with Rule 144(c) such information as is required for the Purchasers to sell the Shares under Rule 144.

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 will be integrated with the offer or sale of the Shares in a manner that would require the registration under the Securities Act of the sale of the Shares to the Purchasers, or that will be integrated with the offer or sale of the Shares for purposes of the rules and regulations of any Trading Market such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction; provided, however, that this Section 4.3 shall not limit the Company's right to issue shares of Capital Stock pursuant to the Merger Agreement.



4.4 Securities Laws Disclosure; Publicity. By 9:00 a.m., New York City time, on the Trading Day immediately following the date hereof, the Company shall issue a press release (the “Press Release”) disclosing all material terms of the transactions contemplated hereby. On or before 5:30 p.m., New York City time, on the fourth Business Day immediately following the execution of this Agreement, the Company will file a Current Report on Form 8-K with the Commission describing the terms of the Transaction Documents (and including as exhibits to such Current Report on Form 8-K the material Transaction Documents (including, without limitation, this Agreement and the Registration Rights Agreement)). Notwithstanding the foregoing, the Company shall not publicly disclose the name of any Purchaser or an Affiliate of any Purchaser, or include the name of any Purchaser or an Affiliate of any Purchaser in any press release or filing with the Commission (other than the Registration Statement) or any regulatory agency or Trading Market, without the prior written consent of such Purchaser, except (i) as required by U.S. federal securities law in connection with (A) any Registration Statement contemplated by the Registration Rights Agreement or (B) the filing of final Transaction Documents (including signature pages to this Agreement) with the Commission and (ii) to the extent such disclosure is required by law, request of the Commission’s staff or Trading Market regulations, in which case the Company shall provide the Purchasers with prior written notice of such disclosure permitted under this subclause (ii). Each Purchaser, severally and not jointly with the other Purchasers, covenants that until such time as the transactions contemplated by this Agreement are required to be publicly disclosed by the Company as described in this Section 4.4, such Purchaser will maintain the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction); *provided, however*, any disclosure may be made by such Purchaser to such Purchaser’s representatives or agents, including, but not limited to, such Purchaser’s legal, tax and investment advisors.

4.5 Anti-takeover Terms. 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 “interested stockholder” under Section 203 of the Delaware General Corporation Law or that any Purchaser could be deemed to trigger the provisions of any poison pill or anti-takeover plan or arrangement, to the extent solely by virtue of receiving the Shares or the Conversion Shares under the Transaction Documents.

4.6 Non-Public Information. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, including this Agreement, or as expressly required by any applicable securities law, 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 regarding the Company that the Company believes constitutes material non-public information without the express written consent of such Purchaser, unless prior thereto such Purchaser shall have executed a written agreement regarding the confidentiality and use of such information. 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 Shares hereunder for working capital and general corporate purposes.

4.8 Principal Trading Market Listing. In the time and manner required by the Principal Trading Market, the Company shall prepare and file with such Principal Trading Market an additional shares listing application covering all of the Shares and Conversion Shares and shall use its commercially reasonable efforts to take all steps necessary to cause all of the Shares and Conversion Shares to be approved for listing on the Principal Trading Market as promptly as possible thereafter.

4.9 Form D. The Company agrees to timely file a Form D with respect to the Shares, as required under Regulation D.

4.10 Short Sales After the Date Hereof. Each Purchaser shall not, and shall cause its Trading Affiliates not to, engage, directly or indirectly, in any transactions in the Company's securities (including, without limitation, any Short Sales involving the Company's securities) during the period from the date hereof until the earlier of such time as (i) the transactions contemplated by this Agreement are first publicly announced as required by and described in Section 4.4 or (ii) this Agreement is terminated in full. 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 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 Transaction Documents; *provided, however*, any disclosure may be made to such Purchaser's representatives or agents, including, but not limited to, such Purchaser's legal, tax and investment advisors.

Notwithstanding the foregoing, no Purchaser makes any representation, warranty or covenant hereby that it will not engage in Short Sales in the securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced as described in Section 4.4; *provided, however*, each Purchaser agrees, severally and not jointly with any Purchasers, that such Purchaser will not enter into any Net Short Sales (as hereinafter defined) during the Reporting Period.

Notwithstanding the foregoing, in the case of a Purchaser and/or Trading Affiliate that is, individually or collectively, a multi-managed investment bank or vehicle whereby separate portfolio managers manage separate portions of such Purchaser's or Trading Affiliate's assets, this Section 4.10 shall apply only with respect to the portfolio manager that made the investment decision to purchase the Shares covered by this Agreement.

For purposes of this Section 4.10, a "Net Short Sale" by any Purchaser shall mean a sale of Common Stock by such Purchaser that is marked as a short sale and that is made at a time when there is no Equivalent Offsetting Long Position in Common Stock (as hereinafter defined) held by such Purchaser. For purposes of this Section 4.10, an "Equivalent Offsetting Long Position in Common Stock" means, with respect to a Purchaser, all shares of Common Stock (A) that are owned by such Purchaser and (B) that would be issuable upon conversion, exchange or exercise of the Shares and any other options or convertible securities then held by such Purchaser, if any, without giving effect to any limitation on conversion, exchange or exercise set forth therein. Notwithstanding the foregoing, in the event that a Purchaser has sold Securities pursuant to Rule 144 prior to the Effective Date of the initial Registration Statement and the Company has failed to deliver certificates without legends prior to the settlement date for such sale (assuming that such certificates are requested by Purchaser and meet the requirements set forth in Section 4.1(c) for the removal of legends), the provisions of this Section 4.10 shall not prohibit the Purchaser from entering into Net Short Sales for the purpose of delivering shares of Common Stock in settlement of such sale.

4.11 Requisite Stockholder Approval. The Company shall use reasonable best efforts to hold a special meeting of stockholders (a “Stockholder Meeting”) within 180 days from the Closing (the “Stockholder Meeting Deadline”) for the purpose of obtaining stockholder approval to allow for the conversion of the issued and outstanding Series X Preferred Stock into shares of Common Stock in accordance with Nasdaq Marketplace Rule 5635(a) (the “Requisite Stockholder Approval”), but remaining subject to a beneficial ownership conversion limit not to exceed 19.99% for any given stockholder. The Company shall use its reasonable best efforts to solicit stockholder approval of such resolution and to cause the Board of Directors to recommend to the stockholders that they approve such resolution. If the Requisite Stockholder Approval is not obtained on or prior to the Stockholder Meeting Deadline, the Company shall cause an additional Stockholder Meeting to be held within 90 days from the prior meeting (the “Extended Stockholder Approval Period”). If the Requisite Stockholder Approval is not obtained within the Extended Stockholder Approval Period, then the Company shall convene additional stockholder meetings every 90 days thereafter until the Requisite Stockholder Approval is obtained.

4.12 Conversion and Exercise Procedures. Each of the form of Notice of Conversion included in the Certificate of Designation set forth the totality of the procedures required of the Purchasers in order to convert the Shares. 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 for the registered holder thereof to convert the Shares. No additional legal opinion, other information or instructions shall be required of the Purchasers to convert their Securities. The Company shall honor conversions of the Shares and shall deliver Conversion Shares in accordance with the terms, conditions and time periods set forth in the Certificate of Designation.

## ARTICLE V CONDITIONS PRECEDENT TO CLOSING

5.1 Conditions Precedent to the Obligations of the Purchasers to Purchase Securities. The obligation of each Purchaser to acquire the Shares at the Closing is subject to the fulfillment to such Purchaser’s satisfaction, on or prior to the Closing Date, of each of the following conditions, any of which may be waived by such Purchaser (as to itself only):

(a) Representations and Warranties. The representations and warranties of the Company contained in Section 3.1 shall be true and correct in all respects as of the date when made and as of the Closing Date, as though made on and as of such date, except for such representations and warranties that speak as of a specific date, which shall be true and correct in all respects as of such specified date.

(b) Performance. The Company shall have performed, satisfied and complied in all respects with all covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by it at or prior to the Closing.

(c) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or Governmental Authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

(d) Consents. The Company shall have obtained in a timely fashion any and all consents, permits, approvals, registrations and waivers necessary for consummation of the purchase and sale of the Shares, all of which shall be and remain so long as necessary in full force and effect.

(e) Adverse Changes. Since the date of execution of this Agreement, no event or series of events shall have occurred that has had or would reasonably be expected to have a Material Adverse Effect.

(f) No Suspensions of Trading in Common Stock. The Common Stock shall not have been suspended, as of the Closing Date, by the Commission or the Principal Trading Market from trading on the Principal Trading Market nor shall suspension by the Commission or the Principal Trading Market have been threatened, as of the Closing Date, either (A) in writing by the Commission or the Principal Trading Market or (B) by falling below the minimum listing maintenance requirements of the Principal Trading Market.

(g) Company Deliverables. The Company shall have delivered the Company Deliverables in accordance with Section 2.3(a).

(h) Merger. The Merger shall have been consummated in accordance with the Merger Agreement.

(i) Termination. This Agreement shall not have been terminated as to such Purchaser in accordance with Section 6.18 herein.

5.2 Conditions Precedent to the Obligations of the Company. The Company's obligation to issue the Shares at the Closing is subject to the fulfillment to the satisfaction of the Company on or prior to the Closing Date of the following conditions, any of which may be waived by the Company:

(a) Representations and Warranties. The representations and warranties made by each Purchaser in Section 3.2 hereof shall be true and correct in all respects as of the date when made, and as of the Closing Date as though made on and as of such date, except for representations and warranties that speak as of a specific date, which shall be true and correct in all respects as of such specified date.

(b) Performance. Such Purchaser shall have performed, satisfied and complied in all respects with all covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by such Purchaser at or prior to the Closing Date.

(c) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or Governmental Authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

- (d) Purchasers Deliverables. Such Purchaser shall have delivered its Purchaser Deliverables in accordance with Section 2.3(b).
- (e) Merger. The Merger shall have been consummated in accordance with the Merger Agreement.
- (f) Termination. This Agreement shall not have been terminated as to such Purchaser in accordance with Section 6.18 herein.

**ARTICLE VI  
MISCELLANEOUS**

6.1 Fees and Expenses. The Company and the Purchasers shall each pay the fees and expenses of their respective advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party in connection with the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees, stamp taxes and other taxes and duties levied in connection with the sale and issuance and sale of the Shares to the Purchasers.

6.2 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 supersede all prior agreements, understandings, discussions and representations, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules. At or after the Closing, and without further consideration, the Company and the Purchasers will execute and deliver to the other such further documents as may be reasonably requested in order to give practical effect to the intention of the parties under the Transaction Documents.

6.3 Notices. All notices and other communications hereunder shall be in writing and shall be deemed duly given (a) on the date of delivery if delivered personally, or if by e mail upon written confirmation of receipt by e mail or otherwise, (b) on the first Trading Day following the date of dispatch if delivered utilizing a next-day service by a recognized next-day courier or (c) on the earlier of confirmed receipt or the fifth Trading Day following the date of mailing if delivered by registered or certified mail, return receipt requested, postage prepaid. All notices hereunder shall be delivered to the addresses set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

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| If to the Company: | Catabasis Pharmaceuticals, Inc.<br>100 High Street, Floor 28<br>Boston, Massachusetts 02110<br>Attention: General Counsel<br>E-mail: bharshbarger@catabasis.com |
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| With a copy to: | Wilmer Cutler Pickering Hale and Dorr LLP<br>60 State Street<br>Boston, Massachusetts 02109<br>Attention: Rosemary G. Reilly, Esq.<br>Joseph B. Conahan, Esq.<br>E-mail: rosemary.reilly@wilmerhale.com<br>joseph.conahan@wilmerhale.com |
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|                    |   |
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| If to a Purchaser: | To the address set forth under such Purchaser's name on the signature page hereof |
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or such other address as may be designated in writing hereafter, in the same manner, by such Person.

6.4 Amendments; Waivers; No Additional Consideration. 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 the Purchasers of at least a majority in interest of the Shares still held by Purchasers or, in the case of a waiver, by the party against whom enforcement of any such waiver is sought. 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 either party to exercise any right hereunder in any manner impair the exercise of any such right. No consideration shall be offered or paid to any Purchaser to amend or consent to a waiver or modification of any provision of any Transaction Document unless the same consideration is also offered to all Purchasers who then hold the Shares.

6.5 Construction. 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. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party. This Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement or any of the Transaction Documents.

6.6 Successors and Assigns. The provisions of this Agreement shall inure to the benefit of and be binding upon the parties and their successors and permitted assigns. This Agreement, or any rights or obligations hereunder, may not be assigned by the Company without the prior written consent of each Purchaser. Any Purchaser may assign its rights hereunder in whole or in part to any Person to whom such Purchaser assigns or transfers any Shares in compliance with the Transaction Documents and applicable law, provided such transferee shall agree in writing to be bound, with respect to transferred Shares, by the terms and conditions of this Agreement that apply to the "Purchasers".

6.7 Third-Party Beneficiaries. 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; provided, however, that the Placement Agent is an intended third-party beneficiary of the representations and warranties of the Company and of each Purchaser set forth in Section 3.1 and Section 3.2, respectively, of this Agreement. The parties hereto further agree that the Placement Agent may rely on or, if the Placement Agent so requests, be specifically named as an addressee of the legal opinions to be delivered pursuant to this Agreement.

6.8 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Agreement 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 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, employees or agents) shall be commenced exclusively in the New York Courts. Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith 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 Proceeding, any claim that it is not personally subject to the jurisdiction of any such New York Court, or that such Proceeding has been commenced in an improper or inconvenient forum. Each party hereto hereby irrevocably waives personal service of process and consents to process being served in any such 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 manner permitted by law. **EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.**

6.9 Survival. Subject to applicable statute of limitations, the representations, warranties, agreements and covenants contained herein shall survive the Closing and the delivery of the Shares.

6.10 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 the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission, or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile signature page were an original thereof.

6.11 Severability. If any provision of this Agreement is held to be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Agreement shall not in any way be affected or impaired thereby and the parties will attempt to agree upon a valid and enforceable provision that is a reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Agreement.

6.12 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) the 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.

6.13 Replacement of Securities. If any certificate or instrument evidencing any Shares or Conversion Shares is mutilated, lost, stolen or destroyed, the Company may issue or cause to be issued in exchange and substitution for and upon cancellation thereof, or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company and the Transfer Agent of such loss, theft or destruction and the execution by the holder thereof of a customary lost certificate affidavit of that fact and an agreement to indemnify and hold harmless the Company and the Transfer Agent for any losses in connection therewith or, if required by the Transfer Agent, a bond in such form and amount as is required by the Transfer Agent. The applicants for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs associated with the issuance of such replacement Shares or Conversion Shares. If a replacement certificate or instrument evidencing any Shares or Conversion Shares is requested due to a mutilation thereof, the Company may require delivery of such mutilated certificate or instrument as a condition precedent to any issuance of a replacement.

6.14 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 described in the foregoing sentence and hereby agree to waive in any action for specific performance of any such obligation (other than in connection with any action for a temporary restraining order) the defense that a remedy at law would be adequate.

6.15 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.

6.16 Adjustments in Share Numbers and Prices. In the event of any stock split, subdivision, dividend or distribution payable in shares of Common Stock (or other securities or rights convertible into, or entitling the holder thereof to receive directly or indirectly shares of Common Stock), combination or other similar recapitalization or event occurring after the date hereof and prior to the Closing, each reference in any Transaction Document to a number of shares or a price per share shall be deemed to be amended to appropriately account for such event.



6.17 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 of the obligations of any other Purchaser under any Transaction Document. The decision of each Purchaser to purchase Shares pursuant to the Transaction Documents has been made by such Purchaser independently of any other Purchaser and independently of any information, materials, statements or opinions as to the business, affairs, operations, assets, properties, liabilities, results of operations, condition (financial or otherwise) or prospects of the Company or any Subsidiary which may have been made or given by any other Purchaser or by any agent or employee of any other Purchaser, and no Purchaser and any of its agents or employees shall have any liability to any other Purchaser (or any other Person) relating to or arising from any such information, materials, statement or opinions. Nothing contained herein or in any Transaction Document, and no action taken by any Purchaser pursuant 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 acknowledges that no other Purchaser has acted as agent for such Purchaser in connection with making its investment hereunder and that no Purchaser will be acting as agent of such Purchaser in connection with monitoring its investment in the Shares or enforcing its rights under 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, Purchasers and their respective counsels have chosen to communicate with the Company through Cooley LLP, counsel to the Placement Agent. Each Purchaser acknowledges that Cooley LLP has rendered legal advice to the Placement Agent and not to such Purchaser in connection with the transactions contemplated hereby, and that each such Purchaser has relied for such matters on the advice of its own respective counsel. 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 Purchaser.

6.18 Termination. This Agreement may be terminated and the sale and purchase of the Shares abandoned at any time prior to the Closing by either the Company or any Purchaser (with respect to itself only) upon written notice to the other, if the Closing has not been consummated on or prior to 5:00 PM., New York City time, on the Outside Date; *provided, however*, that the right to terminate this Agreement under this Section 6.18 shall not be available to any Person whose failure to comply with its obligations under this Agreement has been the cause of or resulted in the failure of the Closing to occur on or before such time. Nothing in this Section 6.18 shall be deemed to release any party from any liability for any breach by such party of the terms and provisions of this Agreement or the other Transaction Documents or to impair the right of any party to compel specific performance by any other party of its obligations under this Agreement or the other Transaction Documents. In the event of a termination pursuant to this Section 6.18, the Company shall promptly notify all non-terminating Purchasers. Upon a termination in accordance with this Section 6.18, the Company and the terminating Purchaser(s) shall not have any further obligation or liability (including arising from such termination) to the other, and no Purchaser will have any liability to any other Purchaser under the Transaction Documents as a result therefrom.

6.19 Exculpation of Placement Agent. Each party acknowledges and agrees that it has read the notice attached hereto as Exhibit E and hereto agrees for the express benefit of the Placement Agent, its affiliates and its representatives that:

(a) Neither the Placement Agent nor any of its affiliates or representatives (1) has any duties or obligations other than those specifically set forth in the engagement letter that each Placement Agent has entered into with the Company (each, an “Engagement Letter”); (2) shall be liable for any improper payment made in accordance with the information provided by the Company; (3) makes any representation or warranty, or has any responsibilities as to the validity, accuracy, value or genuineness of any information, certificates or documentation delivered by or on behalf of the Company pursuant to this Agreement or in connection with any of the transactions contemplated by this Agreement; or (4) shall be liable (x) for any action taken, suffered or omitted by any of them in good faith and reasonably believed to be authorized or within the discretion or rights or powers conferred upon it by this Agreement or (y) for anything which any of them may do or refrain from doing in connection with this Agreement, except for such party’s own gross negligence, willful misconduct or bad faith.

(b) The Placement Agent, its affiliates and its representatives shall be entitled to (1) rely on, and shall be protected in acting upon, any certificate, instrument, opinion, notice, letter or any other document or security delivered to any of them by or on behalf of the Company, and (2) be indemnified by the Company for acting as Placement Agent hereunder pursuant the indemnification provisions set forth in the Placement Agent’s Engagement Letter.

6.20 Waiver of Potential Conflicts of Interest. Each of the Purchasers and the Company acknowledges that Wilmer Cutler Pickering Hale and Dorr LLP (“WilmerHale”) may have represented and may currently represent certain of the Purchasers. In the course of such representation, WilmerHale may have come into possession of confidential information relating to such Purchasers. Each of the Purchasers and the Company acknowledges that WilmerHale is representing only the Company in this transaction. By executing this Agreement, each of the Purchasers and the Company hereby waives any actual or potential conflict of interest which has or may arise as a result of WilmerHale’s representation of such persons and entities, and represents that it has had the opportunity to consult with independent counsel concerning the giving of this waiver.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

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

**CATABASIS PHARMACEUTICALS, INC.**

By: /s/ Jill C. Milne

Name: Jill C. Milne

Title: President and Chief Executive Officer

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

WEDBUSH HEALTHCARE PARTNERS 2021 FUND, LLC

By: /s/ Ben Davey

Name: Ben Davey

Title: Managing Director, Head of ECM

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

FAIRMOUNT HEALTHCARE FUND LP

By: /s/ Tomas Kiselak

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Name: Tomas Kiselak

Title: Managing Member

[\*\*\*]

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

FAIRMOUNT HEALTHCARE FUND II LP

By: /s/ Tomas Kiselak

Name: Tomas Kiselak

Title: Managing Member

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

LOGOS GLOBAL MASTER FUND LP  
By: Logos GP LLC  
Its General Partner

By: /s/ Arsani William  
Name: Arsani William  
Title: Managing Partner

[\*\*\*]

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

RA CAPITAL HEALTHCARE FUND, L.P.  
By: RA Capital Healthcare Fund GP, LLC  
Its: General Partner

By: /s/ Rajeev Shah  
Name: Rajeev Shah  
Title: Manager

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[\*\*\*]

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

COMMODORE CAPITAL MASTER LP

By: /s/ R. Egen Atkinson, MD

\_\_\_\_\_  
Name: R. Egen Atkinson, MD

Title: Authorized Signatory

[\*\*\*]

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

SERRADO OPPORTUNITY FUND LLC

By: /s/ Stewart J. Hen

Name: Stewart J. Hen

Title: Managing Member

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

SPHERA BIOTECH MASTER FUND, LP

By: /s/ Doron Breen

Name: Doron Breen

Title: Director of General Partner

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

CITADEL MULTI-STRATEGY EQUITIES MASTER FUND LTD.

By: Citadel Advisors LLC, its portfolio manager

By: /s/ Shellane Mulcahy

Name: Shellane Mulcahy

Title: Authorized Signatory

[\*\*\*]

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

PERCEPTIVE LIFE SCIENCES MASTER FUND, LTD.

By: /s/ James Mannix  
Name: James Mannix  
Title: COO

[\*\*\*]

PERCEPTIVE XONTOGENY VENTURE FUND, LP

By: /s/ James Mannix  
Name: James Mannix  
Title: COO

By: /s/ Frederick Callori  
Name: Frederick Callori  
Title: Partner

[\*\*\*]

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

CRMA SPV, L.P.

By: /s/ Bihua Chen

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By: Cormorant Asset Management, LP, its

Attorney-in-fact

Name: Bihua Chen

Title: Managing Member

[\*\*\*]

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

CORMORANT GLOBAL HEALTHCARE MASTER FUND, LP

By: /s/ Bihua Chen

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By: Cormorant Global Healthcare GP, LLC

Name: Bihua Chen

Title: Managing Member

[\*\*\*]

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

BOXER CAPITAL, LLC

By: /s/ Aaron Davis

Name: Aaron Davis

Title: Chief Executive Officer

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

MVA INVESTORS, LLC

By: /s/ Aaron Davis  
Name: Aaron Davis  
Title: Chief Executive Officer

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

ACUTA CAPITAL FUND, LP  
By: Acuta Capital Partners, LLC  
Its: General Partner

By: /s/ Scott R. Smith  
Name: Scott R. Smith  
Title: Chief Operating Officer

[\*\*\*]

ACUTA OPPORTUNITY FUND, LP  
By: Acuta Capital Partners, LLC  
Its: General Partner

By: /s/ Scott R. Smith  
Name: Scott R. Smith  
Title: Chief Operating Officer

[\*\*\*]

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

VENROCK HEALTHCARE CAPITAL PARTNERS EG, L.P.

By: VHCP Management EG, LLC, its general partner

By: /s/ Nimish Shah

Name: Nimish Shah

Title: Authorized Signatory

[\*\*\*]

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

VENROCK HEALTHCARE CAPITAL PARTNERS III, L.P.

By: VHCP Management III, LLC, its general partner

By: VR Advisor, LLC, its manager

By: /s/ Nimish Shah

Name: Nimish Shah

Title: Authorized Signatory

[\*\*\*]

VHCP CO-INVESTMENT HOLDINGS III, LLC

By: VHCP Management III, LLC, its manager

By: VR Advisor, LLC, its manager

By: /s/ Nimish Shah

Name: Nimish Shah

Title: Authorized Signatory

[\*\*\*]

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

VENROCK HEALTHCARE CAPITAL PARTNERS II, L.P.

By: VHCP Management II, LLC, its general partner

By: VR Advisor, LLC, its manager

By: /s/ Nimish Shah

Name: Nimish Shah

Title: Authorized Signatory

[\*\*\*]

VHCP CO-INVESTMENT HOLDINGS II, LLC

By: VHCP Management II, LLC, its manager

By: VR Advisor, LLC, its manager

By: /s/ Nimish Shah

Name: Nimish Shah

Title: Authorized Signatory

[\*\*\*]

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

ACORN BIOVENTURES, L.P.

By: Acorn Capital Advisors GP, LLC, a Delaware limited liability company  
Its: General Partner

By: /s/ Anders Hove

Name: Anders Hove

Title: Member

[\*\*\*]

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**SCHEDULE 3.1(F)**  
**PRO FORMA CAPITALIZATION**

Pro Forma Capitalization (after Merger and issuance of Shares)

Treasury Stock Method Basis

|                                      | Preferred Shares | As Converted Basis |
|--------------------------------------|------------------|--------------------|
| Outstanding Common Stock             |                  | 23,417,006         |
| Outstanding Series X Preferred Stock | 86,077           | 86,077,000         |
| Outstanding Options                  |                  | 332,494            |
| Outstanding Common Warrants          |                  | 185,136            |
| Outstanding Preferred Warrants       | 2,805            | 2,805,000          |
| <b>TOTAL</b>                         |                  | <b>112,816,636</b> |

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ANNEX A

SCHEDULE OF PURCHASERS

See attached.

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EXHIBIT A

CERTIFICATE OF DESIGNATION

See attached.

(See Exhibit 3.1 to the Current Report on Form 8-K which this Exhibit A is a part)

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EXHIBIT B

FORM OF REGISTRATION RIGHTS AGREEMENT

See attached.

(See Exhibit 10.2 to the Current Report on Form 8-K which this Exhibit A is a part)

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EXHIBIT C

STOCK CERTIFICATE QUESTIONNAIRE

Pursuant to Section 2.3(b) of the Agreement, please provide us with the following information:

1. The exact name that the Shares are to be registered in (this is the name that will appear on the stock certificate(s)). You may use a nominee name if appropriate: \_\_\_\_\_
2. The relationship between the Purchaser of the Shares and the Registered Holder listed in response to Item 1 above: \_\_\_\_\_
3. The mailing address, telephone and telecopy number of the Registered Holder listed in response to Item 1 above: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. The U.S. Tax Identification Number (or, if an individual, the U.S. Social Security Number) of the Registered Holder listed in response to Item 1 above: \_\_\_\_\_  
\_\_\_\_\_

EXHIBIT D

MERGER AGREEMENT

(See Exhibit 2.1 to the Current Report on Form 8-K which this Exhibit A is a part)

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EXHIBIT E

JEFFERIES REQUIRED DISCLOSURE

On February 2, 2016, pursuant to an offer of settlement by Jefferies LLC, the SEC entered an administrative order, pursuant to its Municipalities Continuing Disclosure Cooperation (“MCDC”) initiative, finding that Jefferies LLC, in connection with its underwriting of certain municipal securities offerings, willfully violated Section 17(a)(2) of the Securities Act of 1933. The administrative order requires Jefferies LLC to cease and desist from committing or causing any violations or any future violations of Section 17(a)(2), to pay a civil penalty, and to complete certain undertakings. Jefferies LLC received waivers from the SEC of any disqualifications under Regulations A (Rule 262), D (Rule 505 and 506), and E arising from the settlement, effective as of February 2, 2016. The SEC Order is available at <https://www.sec.gov/rules/other/2016/33-10030.pdf>.

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## REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this “**Agreement**”) is dated as of January 28, 2021, by and among Catabasis Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), and the several purchasers signatory hereto (each, including its successors and assigns, a “**Purchaser**” and collectively, the “**Purchasers**”).

This Agreement is made pursuant to the Stock Purchase Agreement, dated as of January 28, 2021, between the Company and the Purchasers (the “**Purchase Agreement**”).

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 of the Purchasers agree as follows:

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

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

“**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 State of New York are generally are open for use by customers on such day.

“**Closing Date**” has the meaning set forth in the Purchase Agreement.

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

“**Common Stock**” means the Company’s common stock, par value \$0.001 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.

“**Effectiveness Deadline**” means, with respect to the Initial Registration Statement or the New Registration Statement, the 30<sup>th</sup> calendar day following the Filing Deadline (or, in the event the Commission reviews and has comments to the Initial Registration Statement or the New Registration Statement, the 60<sup>th</sup> calendar day following the Filing Deadline); *provided, however*, that if the Company is notified by the Commission that the Initial Registration Statement or the New Registration Statement will not be reviewed or is no longer subject to further review and comments, the Effectiveness Deadline as to such Registration Statement shall be the fifth Trading Day following the date on which the Company is so notified if such date precedes the dates otherwise required above; *provided, further*, that if the Effectiveness Deadline falls on a Saturday, Sunday or other day that the Commission is closed for business, the Effectiveness Deadline shall be extended to the next Business Day on which the Commission is open for business.

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

“**Filing Deadline**” means, with respect to the Initial Registration Statement required to be filed pursuant to Section 2(a), the 90<sup>th</sup> calendar day following the Closing Date, *provided, however*, that if the Filing Deadline falls on a Saturday, Sunday or other day that the Commission is closed for business, the Filing Deadline shall be extended to the next Business Day on which the Commission is open for business.

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

“**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.

“**Principal Trading Market**” means the Trading Market on which the Common Stock is primarily listed on and quoted for trading, which, as of the Closing Date, shall be the Nasdaq Global Market.

“**Proceeding**” means an action, claim, suit, investigation or proceeding (including, without limitation, an investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“**Pro Rata Interest**” means the number of Registrable Securities beneficially held by any given Purchaser, relative to the total number of Registrable Securities that are the subject of this Agreement.

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

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“**Registrable Securities**” means all of (i) the Shares, (ii) any Common Stock issued to a Purchaser on the date hereof pursuant to that certain Agreement and Plan of Merger, dated as of January 28, 2021, by and among the Company, Cabo Merger Sub I, Inc., Cabo Merger Sub II, LLC and Quellis Biosciences, Inc., and (iii) any securities issued or issuable upon any stock split, dividend or other distribution, recapitalization or similar event with respect to the foregoing, *provided*, that the Holder has completed and delivered to the Company a Selling Shareholder Questionnaire; and *provided, further*, that with respect to a particular Holder, such Holder’s Shares shall cease to be Registrable Securities upon the earliest to occur of the following: (A) a sale pursuant to a Registration Statement or Rule 144 under the Securities Act (in which case, only such security or securities sold by the Holder shall cease to be Registrable Securities); (B) becoming eligible for resale by the Holder under Rule 144 without the requirement for the Company to be in compliance with the current public information required thereunder and without volume or manner-of-sale restrictions; or (C) the expiration of two years from the Closing Date.

“**Registration Statements**” means any one or more registration statements of the Company filed under the Securities Act that covers the resale of any of the Registrable Securities pursuant to the provisions of this Agreement (including without limitation the Initial Registration Statement, the New Registration Statement and any Remainder Registration Statements), amendments and supplements to such Registration Statements, including post-effective amendments, all exhibits and all material incorporated by reference or deemed to be incorporated by reference in such Registration Statements.

“**Rule 144**” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

“**Rule 415**” means Rule 415 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

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

“**SEC Guidance**” means (i) any publicly-available written or oral guidance, comments, requirements or requests of the Commission staff; *provided*, that any such oral guidance, comments, requirements or requests are reduced to writing by the Commission and (ii) the Securities Act.

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

“**Selling Shareholder Questionnaire**” means a questionnaire in the form attached as Annex B hereto, or such other form of questionnaire as may reasonably be adopted by the Company from time to time.

“**Series X Preferred Shares**” means the Series X Convertible Preferred Stock, par value \$0.001 per share, of the Company.

“**Shares**” means the shares of Common Stock which may be issued upon conversion of the Series X Preferred Shares.

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

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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).

## 2. REGISTRATION.

(a) On or prior to the Filing Deadline, the Company shall prepare and file with the Commission a Registration Statement covering the resale of all of the Registrable Securities not then registered on an existing and effective Registration Statement for an offering to be made on a continuous basis pursuant to Rule 415 or, if Rule 415 is not available for offers and sales of the Registrable Securities, by such other means of distribution of Registrable Securities as the Holders may reasonably specify (the “**Initial Registration Statement**”). The Initial Registration Statement shall be on Form S-3 (except if the Company is then ineligible to register for resale the Registrable Securities on Form S-3, in which case such registration shall be on such other form available to register for resale the Registrable Securities as a secondary offering) subject to the provisions of Section 2(d) and shall contain (except if otherwise required pursuant to written comments received from the Commission upon a review of such Registration Statement) the “Plan of Distribution” section substantially in the form attached hereto as Annex A (which may be modified to respond to comments, if any, provided by the Commission). Notwithstanding the registration obligations set forth in this Section 2, in the event the Commission informs the Company that all of the Registrable Securities cannot, as a result of the application of Rule 415, be registered for resale as a secondary offering on a single registration statement, the Company agrees to promptly (i) inform each of the Holders thereof and use its commercially reasonable efforts to file amendments to the Initial Registration Statement as required by the Commission and/or (ii) withdraw the Initial Registration Statement and file a new registration statement (a “**New Registration Statement**”), in either case covering the maximum number of Registrable Securities permitted to be registered by the Commission, on Form S-3 or, if the Company is ineligible to register the Registrable Securities on Form S-3, such other form available to register for resale the Registrable Securities as a secondary offering; *provided, however*, that prior to filing such amendment or New Registration Statement, the Company shall be obligated to use its commercially reasonable efforts to advocate with the Commission for the registration of all of the Registrable Securities in accordance with the SEC Guidance, including without limitation, the Securities Act Rules Compliance and Disclosure Interpretations Question 612.09. Notwithstanding any other provision of this Agreement, if any SEC Guidance sets forth a limitation of the number of Registrable Securities permitted to be registered on a particular Registration Statement as a secondary offering (and notwithstanding that the Company used diligent efforts to advocate with the Commission for the registration of all or a greater number of Registrable Securities), unless otherwise directed in writing by a Holder as to its Registrable Securities, the number of Registrable Securities to be registered on such Registration Statement will first be reduced by Registrable Securities not acquired pursuant to the Purchase Agreement (whether pursuant to registration rights or otherwise), and second by Registrable Securities represented by Shares (applied, in the case that some Shares may be registered, to the Holders in accordance with their respective Pro Rata Interests, subject to a determination by the Commission that certain Holders must be reduced first based on the number of Shares held by such Holders). In the event the Company amends the Initial Registration Statement or files a New Registration Statement, as the case may be, under clauses (i) or (ii) above, the Company will use its commercially reasonable efforts to file with the Commission, as promptly as allowed by Commission or SEC Guidance provided to the Company or to registrants of securities in general, one or more registration statements on Form S-3 or such other form available to register for resale those Registrable Securities that were not registered for resale on the Initial Registration Statement, as amended, or the New Registration Statement (the “**Remainder Registration Statements**”).

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(b) The Company shall use commercially reasonable efforts to cause each Registration Statement to be declared effective by the Commission as soon as practicable and, with respect to the Initial Registration Statement or the New Registration Statement, as applicable, no later than the Effectiveness Deadline (including filing with the Commission a request for acceleration of effectiveness in accordance with Rule 461 promulgated under the Securities Act), and shall use commercially reasonable efforts to keep each Registration Statement continuously effective under the Securities Act until the earliest of: (i) such time as all of the Registrable Securities covered by such Registration Statement have been sold by the Holders; (ii) the date that all Registrable Securities covered by such Registration Statement may be sold without volume or manner-of-sale restrictions pursuant to Rule 144 and without the requirement for the Company to be in compliance with the current public information requirement under Rule 144; or (iii) the date that is two years from the Closing Date (the “**Effectiveness Period**”). The Company shall promptly notify the Holders of the effectiveness of a Registration Statement or any post-effective amendment thereto. The Company shall file a final Prospectus with the Commission, in the manner and within the time period required by Rule 424(b) and shall, if requested, provide the Holders with copies of the final Prospectus to be used in connection with the sale or other disposition of the securities covered thereby. The Company shall promptly inform each Holder in writing if, at any time during the Effectiveness Period, the Company does not satisfy the conditions specified in Rule 172 and, as a result thereof, the Holder is required to deliver a Prospectus in connection with any disposition of Registrable Securities.

(c) Each Holder agrees to furnish to the Company a completed Selling Shareholder Questionnaire not more than five Trading Days following the date of this Agreement. Each Holder further agrees that it shall not be entitled to be named as a selling securityholder in the Registration Statement or use the Prospectus for offers and resales of Registrable Securities at any time, unless such Holder has returned to the Company a completed and signed Selling Shareholder Questionnaire and any further information reasonably requested by the Company. Each Holder acknowledges and agrees that the information in the Selling Shareholder Questionnaire or request for further information as described in this Section 2(c) will be used by the Company in the preparation of the Registration Statement and hereby consents to the inclusion of such information in the Registration Statement.

(d) In the event that Form S-3 is not available for the registration of the resale of Registrable Securities hereunder, the Company shall (i) register the resale of the Registrable Securities on another appropriate form reasonably acceptable to the Holders and (ii) undertake to register the Registrable Securities on Form S-3 promptly after such form is available, *provided* that the Company shall maintain the effectiveness of the Registration Statement then in effect until such time as a Registration Statement on Form S-3 covering the Registrable Securities has been declared effective by the Commission.

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### 3. REGISTRATION PROCEDURES.

In connection with the Company's registration obligations hereunder, the Company shall:

(a) Not less than five Trading Days prior to the filing of each Registration Statement and not less than one Trading Day prior to the filing of any related Prospectus or any amendment or supplement thereto (except for Annual Reports on Form 10-K, and Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and any similar or successor reports), (i) furnish to each Holder copies of such Registration Statement, Prospectus or amendment or supplement thereto, as proposed to be filed, which documents will be subject to the review of such Holder (it being acknowledged and agreed that if a Holder does not object to or comment on the aforementioned documents within such five Trading Day or one Trading Day period, as the case may be, then the Holder shall be deemed to have consented to and approved the use of such documents) and (ii) to the extent that such Holder is identified in the Registration Statement as an "underwriter" (as defined under the Securities Act) use commercially reasonable efforts to cause its officers and directors, counsel and independent registered public accountants to respond to such inquiries as shall be necessary, in the reasonable opinion of respective counsel to each Holder, to conduct a reasonable investigation within the meaning of the Securities Act. The Company shall not file any Registration Statement or amendment or supplement thereto in a form to which a Holder reasonably objects in good faith, provided that, the Company is notified of such objection in writing within the five Trading Day or one Trading Day period described above, as applicable.

(b) (i) Prepare and file with the Commission such amendments (including post-effective amendments) and supplements, to each Registration Statement and the Prospectus used in connection therewith as may be necessary to keep such Registration Statement continuously effective as to the applicable Registrable Securities for its Effectiveness Period; (ii) cause the related Prospectus to be amended or supplemented by any required Prospectus supplement (subject to the terms of this Agreement), and, as so supplemented or amended, to be filed pursuant to Rule 424; (iii) respond as promptly as reasonably practicable to any comments received from the Commission with respect to each Registration Statement or any amendment thereto and, as promptly as reasonably possible, provide the Holders true and complete copies of all correspondence from and to the Commission relating to such Registration Statement that pertains to the Holders as "Selling Stockholders" but not any comments that would result in the disclosure to the Holders of material and non-public information concerning the Company; and (iv) comply with the provisions of the Securities Act and the Exchange Act with respect to the disposition of all Registrable Securities covered by a Registration Statement until such time as all of such Registrable Securities shall have been disposed of (subject to the terms of this Agreement) in accordance with the intended methods of disposition by the Holders thereof as set forth in such Registration Statement as so amended or in such Prospectus as so supplemented; *provided, however*, that each Purchaser shall be responsible for the delivery of the Prospectus to the Persons to whom such Purchaser sells any of the Shares (including in accordance with Rule 172 under the Securities Act), and each Purchaser agrees to dispose of Registrable Securities in compliance with the "Plan of Distribution" described in the Registration Statement and otherwise in compliance with applicable federal and state securities laws. In the case of amendments and supplements to a Registration Statement which are required to be filed pursuant to this Agreement (including pursuant to this Section 3(b)) by reason of the Company filing a report on Form 10-K, Form 10-Q or Form 8-K or any analogous report under the Exchange Act, the Company shall have incorporated such report by reference into such Registration Statement, if applicable, or shall file such amendments or supplements with the Commission on the same day on which the Exchange Act report which created the requirement for the Company to amend or supplement such Registration Statement was filed.

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(c) Notify the Holders (which notice shall (x) pursuant to clauses (iii) through (vi) hereof, be accompanied by an instruction to suspend the use of the Prospectus until the requisite changes have been made and (y) in no event contain any material, nonpublic information relating to the Company and/or any of its subsidiaries) as promptly as reasonably practicable (and, in the case of (i)(A) below, not less than one Trading Day prior to such filing) and (if requested by any such Person) confirm such notice in writing no later than one Trading Day following the day: (i)(A) when a Prospectus or any Prospectus supplement or post-effective amendment to a Registration Statement is proposed to be filed; (B) when the Commission notifies the Company whether there will be a “review” of such Registration Statement and whenever the Commission comments in writing on any Registration Statement (in which case the Company shall provide to each of the Holders true and complete copies of all comments that pertain to the Holders as a “Selling Stockholder” or to the “Plan of Distribution” and all written responses thereto, but not information that the Company believes would constitute material and non-public information); and (C) with respect to each Registration Statement or any post-effective amendment, when the same has become effective; (ii) of any request by the Commission or any other Federal or state governmental authority for amendments or supplements to a Registration Statement or Prospectus or for additional information that pertains to the Holders as “Selling Stockholders” or the “Plan of Distribution”; (iii) of the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of a Registration Statement covering any or all of the Registrable Securities or the initiation of any Proceedings for that purpose; (iv) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction, or the initiation or threatening of any Proceeding for such purpose; (v) of the occurrence of any event or passage of time that makes the financial statements included or incorporated by reference in a Registration Statement ineligible for inclusion or incorporation by reference therein or any statement made in such Registration Statement or Prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires any revisions to such Registration Statement, Prospectus or other documents so that, in the case of such Registration Statement or the Prospectus, as the case may be, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus, form of prospectus or supplement thereto, in light of the circumstances under which they were made), not misleading and (vi) of the occurrence or existence of any pending corporate development with respect to the Company that the Company reasonably believes may be material and that, in the reasonable determination of the Company, makes it not in the best interest of the Company to allow continued availability of a Registration Statement or Prospectus; *provided* that, any and all such information shall remain confidential to each Holder until such information otherwise becomes public, unless disclosure by a Holder is required by law; and *provided, further*, that notwithstanding each Holder’s agreement to keep such information confidential, each such Holder makes no acknowledgement that any such information is material, non-public information.

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(d) Use commercially reasonable efforts to avoid the issuance of, or, if issued, obtain the withdrawal of (i) any order suspending the effectiveness of a Registration Statement, or (ii) any suspension of the qualification (or exemption from qualification) of any of the Registrable Securities for sale in any jurisdiction, as soon as practicable.

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

(f) Cooperate with such Holder to facilitate the timely preparation and delivery of certificates or book entry statements, as applicable, representing Registrable Securities to be delivered to a transferee pursuant to the Registration Statement, which certificates or statements shall be free, to the extent permitted by the Purchase Agreement and under law, of all restrictive legends, and to enable such Registrable Securities to be in such denominations and registered in such names as any such Holders may reasonably request.

(g) Following the occurrence of any event contemplated by Section 3(c), as promptly as reasonably practicable (taking into account the Company's good faith assessment of any adverse consequences to the Company and its shareholders of the premature disclosure of such event), prepare a supplement or amendment, including a post-effective amendment, if applicable, to the affected Registration Statements or a supplement to the related Prospectus or any document incorporated or deemed to be incorporated therein by reference, and file any other required document so that, as thereafter delivered, no Registration Statement nor any Prospectus will contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus, form of prospectus or supplement thereto, in light of the circumstances under which they were made), not misleading. If the Company notifies the Holders in accordance with clauses (iii) through (vi) of Section 3(c) above to suspend the use of any Prospectus until the requisite changes to such Prospectus have been made, then the Holders shall suspend use of such Prospectus. The Company will use its commercially reasonable efforts to ensure that the use of the Prospectus may be resumed as promptly as is practicable. The Company shall be entitled to exercise its right under this Section 3(g) to suspend the availability of a Registration Statement and Prospectus. For the avoidance of doubt, any period of time for which the availability of a Registration Statement and Prospectus are suspended pursuant to Section 2(c) shall be disregarded when determining the time period allotted under this Section 3(g).

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(h) The Company may require each selling Holder to furnish to the Company a certified statement as to (i) the number of shares of Common Stock beneficially owned by such Holder and any Affiliate thereof, (ii) any Financial Industry Regulatory Authority (“FINRA”) affiliations, (iii) any natural persons who have the power to vote or dispose of the Common Stock and (iv) any other information as may be requested by the Commission, FINRA or any state securities commission.

(i) The Company shall cooperate with any registered broker through which a Holder proposes to resell its Registrable Securities in effecting a filing with FINRA pursuant to FINRA Rule 5110 as requested by any such Holder, and following such filing the Company shall pay the filing fee required for the first such filing within two Business Days of the request therefor.

**4. REGISTRATION EXPENSES.** All fees and expenses incident to the Company’s performance of or compliance with its obligations under this Agreement (excluding any underwriting discounts and selling commissions and all legal fees and expenses of legal counsel for any Holder) shall be borne by the Company whether or not any Registrable Securities are sold pursuant to a Registration Statement. The fees and expenses referred to in the foregoing sentence shall include, without limitation, (i) all registration and filing fees (including, without limitation, fees and expenses (A) with respect to filings required to be made with any Trading Market on which the Common Stock are then listed for trading, (B) with respect to compliance with applicable state securities or Blue Sky laws (including, without limitation, fees and disbursements of counsel for the Company in connection with Blue Sky qualifications or exemptions of the Registrable Securities and determination of the eligibility of the Registrable Securities for investment under the laws of such jurisdictions as requested by the Holders) and (C) if not previously paid by the Company in connection with Section 3(i), above, with respect to any filing that may be required to be made by any broker through which a Holder intends to make sales of Registrable Securities with FINRA pursuant to the FINRA Rule 5110, so long as the broker is receiving no more than a customary brokerage commission in connection with such sale), (ii) printing expenses (including, without limitation, expenses of printing certificates for Registrable Securities and of printing prospectuses if the printing of prospectuses is reasonably requested by the Holders of a majority of the Registrable Securities included in the Registration Statement), and (iii) fees and disbursements of counsel for the Company. In addition, the Company shall be responsible for all of its internal expenses incurred in connection with the consummation of the transactions contemplated by this Agreement (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties), the expense of any annual audit and the fees and expenses incurred in connection with the listing of the Registrable Securities on any securities exchange as required hereunder. In no event shall the Company be responsible for any underwriting, broker or similar fees or commissions of any Holder or, except to the extent provided for in the Transaction Documents, any legal fees or other costs of the Holders.

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## 5. INDEMNIFICATION.

(a) Indemnification by the Company. The Company shall, notwithstanding any termination of this Agreement, indemnify, defend and hold harmless each Holder, the officers, directors, agents, partners, members, managers, stockholders, Affiliates and employees of each of them, each Person who controls any such Holder (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) and the officers, directors, partners, members, managers, stockholders, agents and employees of each such controlling Person, to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, reasonable costs of preparation and investigation and reasonable attorneys' fees) and expenses (collectively, "**Losses**"), as incurred, that arise out of or are based upon (i) any untrue or alleged untrue statement of a material fact contained in any Registration Statement, any Prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus or form of prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading, or (ii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act or any state securities law or any rule or regulation thereunder, in connection with the performance of its obligations under this Agreement, except to the extent, but only to the extent, that (A) such untrue statements, alleged untrue statements, omissions or alleged omissions are based solely upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use therein, or to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was reviewed and approved in writing by such Holder expressly for use in the Registration Statement, such Prospectus or such form of Prospectus or in any amendment or supplement thereto (it being understood that each Holder has approved Annex A hereto for this purpose), (B) in the case of an occurrence of an event of the type specified in Section 3(c)(iii)-(vi), related to the use by a Holder of an outdated or defective Prospectus after the Company has notified such Holder in writing that the Prospectus is outdated or defective and prior to the receipt by such Holder of the Advice contemplated and defined in Section 6(d) below, to the extent that following the receipt of the Advice the misstatement or omission giving rise to such Loss would have been corrected or (C) to the extent that any such Losses arise out of the Purchaser's (or any other indemnified Person's) failure to send or give a copy of the Prospectus or supplement (as then amended or supplemented), if required, pursuant to Rule 172 under the Securities Act (or any successor rule) to the Persons asserting an untrue statement or alleged untrue statement or alleged untrue statement or omission or alleged omission at or prior to the written confirmation of the sale of Registrable Securities to such Person if such statement or omission was corrected in such Prospectus or supplement. The Company shall notify the Holders promptly of the institution, threat or assertion of any Proceeding arising from or in connection with the transactions contemplated by this Agreement of which the Company is aware. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of an Indemnified Party (as defined in Section 5(c)) and shall survive the transfer of the Registrable Securities by the Holders.

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(b) Indemnification by Holders. Each Holder shall, severally and not jointly, indemnify and hold harmless the Company, its directors, officers, agents and employees, each Person who controls the Company (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, agents or employees of such controlling Persons, to the fullest extent permitted by applicable law, from and against all Losses, as incurred, arising out of or are based solely upon any untrue or alleged untrue statement of a material fact contained in any Registration Statement, any Prospectus, or any form of prospectus, or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus, or any form of prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading (i) to the extent that such untrue statements or omissions are based solely upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use therein, (ii) to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was reviewed and approved in writing by such Holder expressly for use in a Registration Statement (it being understood that the Holder has approved Annex A hereto for this purpose), such Prospectus or such form of Prospectus or in any amendment or supplement thereto or (iii) in the case of an occurrence of an event of the type specified in Section 3(c)(iii)-(vi), to the extent related to the use by such Holder of an outdated or defective Prospectus after the Company has notified such Holder in writing that the Prospectus is outdated or defective and prior to the receipt by such Holder of the Advice contemplated in Section 6(c). In no event shall the liability of any selling Holder hereunder be greater in amount than the dollar amount of the net proceeds received by such Holder upon the sale of the Registrable Securities giving rise to such indemnification obligation.

(c) Conduct of Indemnification Proceedings. If any Proceeding shall be brought or asserted against any Person entitled to indemnity hereunder (an "**Indemnified Party**"), such Indemnified Party shall promptly notify the Person from whom indemnity is sought (the "**Indemnifying Party**") in writing, and the Indemnifying Party shall have the right to assume the defense thereof, including the employment of counsel reasonably satisfactory to the Indemnified Party and the payment of all reasonable fees and expenses incurred in connection with defense thereof; *provided*, that the failure of any Indemnified Party to give such notice shall not relieve the Indemnifying Party of its obligations or liabilities pursuant to this Agreement, except (and only) to the extent that it shall be finally determined by a court of competent jurisdiction (which determination is not subject to appeal or further review) that such failure shall have materially and adversely prejudiced the Indemnifying Party.

An Indemnified Party shall have the right to employ separate counsel in any such Proceeding and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party or Indemnified Parties unless: (1) the Indemnifying Party has agreed in writing to pay such fees and expenses; (2) the Indemnifying Party shall have failed promptly to assume the defense of such Proceeding and to employ counsel reasonably satisfactory to such Indemnified Party in any such Proceeding; or (3) the named parties to any such Proceeding (including any impleaded parties) include both such Indemnified Party and the Indemnifying Party, and such Indemnified Party shall have been advised by counsel that a conflict of interest exists if the same counsel were to represent such Indemnified Party and the Indemnifying Party (in which case, if such Indemnified Party notifies the Indemnifying Party in writing that it elects to employ separate counsel at the expense of the Indemnifying Party, the Indemnifying Party shall not have the right to assume the defense thereof and such counsel shall be at the expense of the Indemnifying Party); *provided*, that the Indemnifying Party shall not be liable for the fees and expenses of more than one separate firm of attorneys at any time for all Indemnified Parties. The Indemnifying Party shall not be liable for any settlement of any such Proceeding effected without its written consent, which consent shall not be unreasonably withheld, delayed or conditioned. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, effect any settlement of any pending Proceeding in respect of which any Indemnified Party is a party, unless such settlement includes an unconditional release of such Indemnified Party from all liability on claims that are the subject matter of such Proceeding.

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Subject to the terms of this Agreement, all fees and expenses of the Indemnified Party (including reasonable fees and expenses to the extent incurred in connection with investigating or preparing to defend such Proceeding in a manner not inconsistent with this Section 5) shall be paid to the Indemnified Party, as incurred, within twenty Trading Days of written notice thereof to the Indemnifying Party; *provided*, that the Indemnified Party shall promptly reimburse the Indemnifying Party for that portion of such fees and expenses applicable to such actions for which such Indemnified Party is finally judicially determined to not be entitled to indemnification hereunder). The failure to deliver written notice to the Indemnifying Party within a reasonable time of the commencement of any such action shall not relieve such Indemnifying Party of any liability to the Indemnified Party under this Section 5, except to the extent that the Indemnifying Party is substantively and adversely prejudiced in its ability to defend such action.

(d) Contribution. If a claim for indemnification under Section 5(a) or 5(b) is unavailable to an Indemnified Party or insufficient to hold an Indemnified Party harmless for any Losses, then each Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Losses, in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and Indemnified Party in connection with the actions, statements or omissions that resulted in such Losses as well as any other relevant equitable considerations. The relative fault of such Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission of a material fact, has been taken or made by, or relates to information supplied by, such Indemnifying Party or Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action, statement or omission. The amount paid or payable by a party as a result of any Losses shall be deemed to include, subject to the limitations set forth in this Agreement, any reasonable attorneys' or other reasonable fees or expenses incurred by such party in connection with any Proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for in this Section 5 was available to such party in accordance with its terms.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 5(d) were determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to in the immediately preceding paragraph. Notwithstanding the provisions of this Section 5(d), (A) no Holder shall be required to contribute, in the aggregate, any amount in excess of the amount by which the net proceeds actually received by such Holder from the sale of the Registrable Securities subject to the Proceeding exceeds the amount of any damages that such Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission and (B) no contribution will be made under circumstances where the maker of such contribution would not have been required to indemnify the Indemnified Party under the fault standards set forth in this Section 5. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation.

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The indemnity and contribution agreements contained in this Section 5 are in addition to any liability that the Indemnifying Parties may have to the Indemnified Parties and are not in diminution or limitation of the indemnification provisions under the Purchase Agreement.

## 6. MISCELLANEOUS.

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

(b) Compliance. Each Holder covenants and agrees that it will comply with the prospectus delivery requirements of the Securities Act as applicable to it (unless an exemption therefrom is available) in connection with sales of Registrable Securities pursuant to the Registration Statement and shall sell the Registrable Securities only in accordance with a method of distribution described in the Registration Statement.

(c) Discontinued Disposition. By its acquisition of Registrable Securities, each Holder agrees that, upon receipt of a notice from the Company of the occurrence of any event of the kind described in Section 3(c)(iii)-(vi), such Holder will forthwith discontinue disposition of such Registrable Securities under a Registration Statement (but not, for the avoidance of doubt, pursuant to Rule 144 to the extent then available) until it is advised in writing (the “**Advice**”) by the Company that the use of the applicable Prospectus (as it may have been supplemented or amended) may be resumed. The Company will use its commercially reasonable efforts to ensure that the use of the Prospectus may be resumed as promptly as is practicable.

(d) No Inconsistent Agreements. Neither the Company nor any of its subsidiaries has entered, as of the date hereof, nor shall the Company or any of its subsidiaries, on or after the date hereof, enter into any agreement with respect to its securities, that would have the effect of impairing the rights granted to the Holders in this Agreement or otherwise conflicts with the provisions hereof.

(e) Amendments and Waivers. The provisions of this Agreement, including the provisions of this sentence, may not be amended, modified or supplemented, or waived unless the same shall be in writing and signed by the Company and Holders holding no less than a majority of the then outstanding Registrable Securities, provided that any party may give a waiver as to itself. Notwithstanding the foregoing, a waiver or consent to depart from the provisions hereof with respect to a matter that relates exclusively to the rights of Holders and that does not directly or indirectly affect the rights of other Holders may be given by Holders of all of the Registrable Securities to which such waiver or consent relates; *provided, however*, that the provisions of this sentence may not be amended, modified, or supplemented except in accordance with the provisions of the immediately preceding sentence.

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

(g) Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the successors and permitted assigns of each of the parties and shall inure to the benefit of each Holder. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. The Company may not assign its rights (except by merger or in connection with another entity acquiring all or substantially all of the Company's assets) or obligations hereunder without the prior written consent of all the Holders of the then outstanding Registrable Securities. Each Holder may assign its respective rights hereunder in the manner and to the Persons as permitted under the Purchase Agreement; provided in each case that (i) the Holder agrees in writing with the transferee or assignee to assign such rights and related obligations under this Agreement, and for the transferee or assignee to assume such obligations, and a copy of such agreement is furnished to the Company within a reasonable time after such assignment, (ii) the Company is, within a reasonable time after such transfer or assignment, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being transferred or assigned, (iii) at or before the time the Company received the written notice contemplated by clause (ii) of this sentence, the transferee or assignee agrees in writing with the Company to be bound by all of the provisions contained herein and (iv) the transferee or assignee is an "accredited investor," as that term is defined in Rule 501 of Regulation D.

(h) Execution and Counterparts. This Agreement may be executed in two or more counterparts, each of which when so executed shall be deemed to be an original and, all of which taken together shall constitute one and the same Agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both 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 were the original thereof.

(i) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Agreement 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 Proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement (whether brought against a party hereto or its respective Affiliates, employees or agents) shall be commenced exclusively in the New York Courts. Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any Proceeding, any claim that it is not personally subject to the jurisdiction of any such New York Court, or that such Proceeding has been commenced in an improper or inconvenient forum. Each party hereto hereby irrevocably waives personal service of process and consents to process being served in any such 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 manner permitted by law. **EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.**

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

(k) 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 good faith 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.

(l) Headings. The headings in this Agreement are for convenience only and shall not limit or otherwise affect the meaning hereof.

(m) Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under this Agreement are several and not joint with the obligations of any other Purchaser hereunder, and no Purchaser shall be responsible in any way for the performance of the obligations of any other Purchaser hereunder. The decision of each Purchaser to purchase the Securities pursuant to the Transaction Documents has been made independently of any other Purchaser. Nothing contained herein or in any other agreement or document delivered at any closing, 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 with respect to such obligations or the transactions contemplated by this Agreement. Each Purchaser acknowledges that no other Purchaser has acted as agent for such Purchaser in connection with making its investment hereunder and that no Purchaser will be acting as agent of such Purchaser in connection with monitoring its investment in the Registrable Securities or enforcing its rights under the Transaction Documents. Each Purchaser shall be entitled to protect and enforce its rights, including, without limitation, the rights arising out of this Agreement, and it shall not be necessary for any other Purchaser to be joined as an additional party in any Proceeding for such purpose. The Company acknowledges that each of the Purchasers has been provided with the same Registration Rights Agreement for the purpose of closing a transaction with multiple Purchasers and not because it was required or requested to do so by any Purchaser.

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

CATABASIS, PHARMACEUTICALS INC.

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

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

NAME OF INVESTING ENTITY  
AUTHORIZED SIGNATORY

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

Title: \_\_\_\_\_  
ADDRESS FOR NOTICE

c/o: \_\_\_\_\_  
Street: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Tel: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

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## PLAN OF DISTRIBUTION

We are registering the shares of common stock of Catabasis Pharmaceuticals, Inc., par value of \$0.001 per share, or the Common Stock, which we refer to herein as Shares, issued to the selling stockholders to permit the resale of these Shares by the holders of the Shares from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the Shares. We will, or will procure to, bear all fees and expenses incident to our obligation to register the Shares.

The selling stockholders may sell all or a portion of the Shares beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the Shares are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The Shares may be sold on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions. The selling stockholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
  - block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
  - purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
  - an exchange distribution in accordance with the rules of the applicable exchange;
  - privately negotiated transactions;
  - settlement of short sales;
  - broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
  - through the writing or settlement of options or other hedging transactions, whether such options are listed on an options exchange or otherwise;
  - a combination of any such methods of sale; and
  - any other method permitted pursuant to applicable law.
-

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, as amended, or the Securities Act, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that they meet the criteria and conform to the requirements of those provisions.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. If the selling stockholders effect such transactions by selling Shares to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the Shares for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2121.01.

In connection with sales of the Shares or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Shares in the course of hedging in positions they assume. The selling stockholders may also sell Shares short and if such short sale shall take place after the date that this Registration Statement is declared effective by the Commission, the selling stockholders may deliver Shares covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge Shares to broker-dealers that in turn may sell such shares, to the extent permitted by applicable law. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the Shares owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the Shares from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the Shares in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealer or agents participating in the distribution of the Shares may be deemed to be “underwriters” within the meaning of Section 2(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Selling Stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the applicable prospectus delivery requirements of the Securities Act including Rule 172 thereunder and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

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Each selling stockholder has informed the Company that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the Shares. Upon the Company being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of Common Stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling stockholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which such the Shares were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction. In no event shall any broker-dealer receive fees, commissions and markups, which, in the aggregate, would exceed eight percent (8.0%).

Under the securities laws of some U.S. states, the Shares may be sold in such states only through registered or licensed brokers or dealers. In addition, in some U.S. states the Shares may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the Shares registered pursuant to the shelf registration statement, of which this prospectus forms a part.

Each selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the Shares by the selling stockholder and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the Shares to engage in market-making activities with respect to the Shares. All of the foregoing may affect the marketability of the Shares and the ability of any person or entity to engage in market-making activities with respect to the Shares.

We will pay all expenses of the registration of the Shares pursuant to the registration rights agreement, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or "blue sky" laws; *provided, however*, that each selling stockholder will pay all underwriting discounts and selling commissions, if any and any related legal expenses incurred by it. We will indemnify the selling stockholders against certain liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreement, or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholders specifically for use in this prospectus, in accordance with the related registration rights agreements, or we may be entitled to contribution.

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**SELLING STOCKHOLDER NOTICE AND QUESTIONNAIRE**

The undersigned holder of shares of the (i) common stock, par value \$0.001 per share, of Catabasis Pharmaceuticals, Inc. (the “**Company**”) and/or (ii) Series X Convertible Preferred Stock, par value \$0.001 per share, of the Company issued pursuant to a certain Stock Purchase Agreement by and among the Company and the Purchasers named therein, dated as of January 28, 2021 (the “**Agreement**”), understands that the Company intends to file with the Securities and Exchange Commission a registration statement on Form S-3 (the “**Resale Registration Statement**”) for the registration and the resale under Rule 415 of the Securities Act of 1933, as amended (the “**Securities Act**”), of the Registrable Securities in accordance with the terms of the Agreement. All capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Agreement.

In order to sell or otherwise dispose of any Registrable Securities pursuant to the Resale Registration Statement, a holder of Registrable Securities generally will be required to be named as a selling stockholder in the related prospectus or a supplement thereto (as so supplemented, the “**Prospectus**”), deliver the Prospectus to purchasers of Registrable Securities (including pursuant to Rule 172 under the Securities Act) and be bound by the provisions of the Agreement (including certain indemnification provisions, as described below). Holders must complete and deliver this Notice and Questionnaire in order to be named as selling stockholders in the Prospectus. **Holders of Registrable Securities who do not complete, execute and return this Notice and Questionnaire within five Trading Days following the date of the Agreement (1) may not be named as selling stockholders in the Resale Registration Statement or the Prospectus and (2) may not use the Prospectus for resales of Registrable Securities.**

Certain legal consequences arise from being named as a selling stockholder in the Resale Registration Statement and the Prospectus. Holders of Registrable Securities are advised to consult their own securities law counsel regarding the consequences of being named or not named as a selling stockholder in the Resale Registration Statement and the Prospectus.

**NOTICE**

The undersigned holder (the “**Selling Stockholder**”) of Registrable Securities hereby gives notice to the Company of its intention to sell or otherwise dispose of Registrable Securities owned by it and listed below in Item (3), unless otherwise specified in Item (3), pursuant to the Resale Registration Statement. The undersigned, by signing and returning this Notice and Questionnaire, understands and agrees that it will be bound by the terms and conditions of this Notice and Questionnaire and the Agreement.

The undersigned hereby provides the following information to the Company and represents and warrants that such information is accurate and complete:

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**QUESTIONNAIRE**

**1. Name.**

(a) Full Legal Name of Selling Stockholder: \_\_\_\_\_

(b) Full Legal Name of Registered Holder (if not the same as (a) above) through which Registrable Securities Listed in Item 3 below are held:  
\_\_\_\_\_

(c) Full Legal Name of Natural Control Person (which means a natural person who directly or indirectly alone or with others has power to vote or dispose of the securities covered by the questionnaire): \_\_\_\_\_

**2. Contact Information for Notices to Selling Stockholder.**

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax : \_\_\_\_\_

Contact Person: \_\_\_\_\_

E-mail address of Contact Person: \_\_\_\_\_

**3. Social Security Number or Taxpayer identification number.**

Social Security Number or Taxpayer identification number of Selling Stockholder:  
\_\_\_\_\_

**4. Beneficial Ownership of Registrable Securities Issuable Pursuant to the Purchase Agreement.**

Type and Number of Registrable Securities beneficially owned and issued pursuant to the Agreement:  
\_\_\_\_\_

**5. Broker-Dealer Status.**

(a) Are you a broker-dealer?

Yes  No

(b) If “yes” to Section 4(a), did you receive your Registrable Securities as compensation for investment banking services to the Company?

Yes  No

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Note: If no, the Commission's staff has indicated that you should be identified as an underwriter in the Registration Statement.

(c) Are you an affiliate of a broker-dealer?

Yes  No

Note: If yes, provide a narrative explanation below:

(d) If you are an affiliate of a broker-dealer, do you certify that you bought the Registrable Securities in the ordinary course of business, and at the time of the purchase of the Registrable Securities to be resold, you had no agreements or understandings, directly or indirectly, with any person to distribute the Registrable Securities?

Yes  No

Note: If no, the Commission's staff has indicated that you should be identified as an underwriter in the Registration Statement.

**6. Beneficial Ownership of Other Securities of the Company Owned by the Selling Stockholder.**

*Except as set forth below in this Item 5, the undersigned is not the beneficial or registered owner of any securities of the Company other than the Registrable Securities listed above in Item 3.*

Type and amount of other securities beneficially owned: \_\_\_\_\_

**7. Relationships with the Company.**

*Except as set forth below, neither the undersigned nor any of its affiliates, officers, directors or principal equity holders (owners of 5% of more of the equity securities of the undersigned) has held any position or office or has had any other material relationship with the Company (or its predecessors or affiliates) during the past three years.*

State any exceptions here: \_\_\_\_\_

**8. Plan of Distribution.**

*The undersigned has reviewed the form of Plan of Distribution attached as Annex A to the Registration Rights Agreement, and hereby confirms that, except as set forth below, the information contained therein regarding the undersigned and its plan of distribution is correct and complete.*

State any exceptions here: \_\_\_\_\_

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The Company hereby advises the undersigned that the Commission currently takes the position that coverage of Short Sales (as defined in the Purchase Agreement) of shares of common stock "against the box" prior to effectiveness of a resale registration statement with securities included in such registration statement would be a violation of Section 5 of the Securities Act, as set forth in Item 239.10 of the Securities Act Rules Compliance and Disclosure Interpretations compiled by the Office of Chief Counsel, Division of Corporate Finance.

The undersigned agrees to promptly notify the Company of any inaccuracies or changes in the information provided herein that may occur subsequent to the date hereof and prior to the effective date of any applicable Resale Registration Statement. All notices hereunder and pursuant to the Agreement shall be made in writing, by hand delivery, confirmed or facsimile transmission, first-class mail or air courier guaranteeing overnight delivery at the address set forth below. In the absence of any such notification, the Company shall be entitled to continue to rely on the accuracy of the information in this Notice and Questionnaire.

By signing below, the undersigned consents to the disclosure of the information contained herein in its answers to Items (1) through (8) above and the inclusion of such information in the Resale Registration Statement and the Prospectus. The undersigned understands that such information will be relied upon by the Company in connection with the preparation or amendment of any such Registration Statement and the Prospectus.

By signing below, the undersigned acknowledges that it understands its obligation to comply, and agrees that it will comply, with the provisions of the Exchange Act and the rules and regulations thereunder, particularly Regulation M in connection with any offering of Registrable Securities pursuant to the Resale Registration Statement. The undersigned also acknowledges that it understands that the answers to this Questionnaire are furnished for use in connection with Registration Statements filed pursuant to the Registration Rights Agreement and any amendments or supplements thereto filed with the Commission pursuant to the Securities Act.

I confirm that, to the best of my knowledge and belief, the foregoing statements (including without limitation the answers to this Questionnaire) are correct.

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IN WITNESS WHEREOF the undersigned, by authority duly given, has caused this Questionnaire to be executed and delivered either in person or by its duly authorized agent.

Dated:

Beneficial Owner:

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

Name:

Title:

**Please scan a copy of the completed and executed notice and questionnaire, and return to [bharshbarger@catabasis.com](mailto:bharshbarger@catabasis.com).**

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**Catabasis Pharmaceuticals Announces Acquisition of Quellis Biosciences Inc.**

*Acquisition Includes QLS-215, a Potential Best-in-Class Monoclonal Antibody Inhibitor of Plasma Kallikrein in Preclinical Development for the Treatment of Hereditary Angioedema*

*Company Plans to Use Private Placement Financing Proceeds of \$110 Million to Complete IND-Enabling Studies, Phase 1a and Phase 1b/2 Clinical Trials of QLS-215*

*Conference Call and Webcast Today at 9:00AM ET*

**BOSTON, MA, JANUARY 29, 2021** – Catabasis Pharmaceuticals, Inc. (NASDAQ:CATB), a biopharmaceutical company, today announced that it has acquired Quellis Biosciences Inc. (“Quellis”), a privately-held emerging biopharmaceutical company focused on discovering best-in-class new molecules to treat serious rare diseases. Concurrent with the acquisition of Quellis, Catabasis entered into a definitive agreement for the sale of Series X convertible preferred stock (the “Series X preferred stock”) in a private placement to a group of institutional accredited investors led by Perceptive Advisors, with participation from Fairmount Funds Management LLC, RA Capital Management, Cormorant Asset Management, Venrock Healthcare Capital Partners, Logos Capital, Boxer Capital, Acorn Bioventures, Commodore Capital, Surveyor Capital (a Citadel company), Acuta Capital Partners, Sphera Healthcare, and Serrado Capital LLC. The private placement is expected to result in gross proceeds to Catabasis of approximately \$110 million before deducting placement agent and other offering expenses. Catabasis expects to use the proceeds from the private placement primarily to enable the completion of IND-enabling studies, Phase 1a, and Phase 1b/2 clinical trials for the lead program QLS-215 in hereditary angioedema (HAE), a rare, debilitating and potentially life-threatening disease.

“Catabasis has worked diligently with external advisors to explore and evaluate a range of strategic options, and the Board and management team believe that this transaction represents an opportunity to create substantial value for Catabasis’ stockholders,” said Kenneth Bate, Chair of the Catabasis Board of Directors. “Our mission has always been to bring life-changing therapies to patients and families affected by rare diseases. We look forward to progressing QLS-215, a differentiated and potential best-in-class new therapy for patients affected by HAE.”

“We are thrilled that the Catabasis Board and management team selected Quellis as the best acquisition opportunity based on our lead asset, QLS-215, and the vision to produce a leading HAE and rare disease company,” said Chris Garabedian, Chair of the Quellis Board of Directors, CEO of Xontogeny and Portfolio Manager, Perceptive Xontogeny Ventures (a Perceptive Advisors fund). “We are further pleased with the progress we made with Quellis since the formation of the company in 2017.”

Quellis was formed at Xontogeny, a life sciences accelerator, with the founders of Quellis and a seed investment in 2017. The subsequent Series A financing was led by the Perceptive Xontogeny Ventures (PXV) Fund in 2018 with Fairmount Funds. The PXV Fund is participating in the private placement as part of the Perceptive Advisors investment.

The vision for the lead program, QLS-215, is to develop the best-in-class monoclonal antibody inhibitor of plasma kallikrein for HAE with infrequent dosing and sustained blood levels. QLS-215 is a humanized monoclonal antibody targeting plasma kallikrein that has demonstrated potent inhibition of plasma kallikrein as well as extended plasma half-life in non-human primates. Catabasis expects to file an Investigational New Drug application for QLS-215 in the first half of 2022 and plans to initiate a Phase 1 clinical trial with initial results anticipated by the end of 2022. Subsequently, Catabasis expects to initiate a Phase 1b/2 trial in patients affected by HAE in 2023 with initial results anticipated by the end of 2023.

### **Management and Organization**

Catabasis will continue to be led by its current management team consisting of Jill C. Milne, Ph.D., Chief Executive Officer, Noah Clauser, Chief Financial Officer, Joanne M. Donovan, M.D., Ph.D., Chief Medical Officer and Senior Vice President, Clinical Development, Ben Harshbarger, Senior Vice President and General Counsel, Andrew A. Komjathy, Chief Commercial Officer, Andrea Matthews, Senior Vice President, Corporate Affairs, and Andrew Nichols, Ph.D., Chief Scientific Officer.

Following the transaction, the Catabasis Board will comprise Kenneth Bate, Chair of the Board of Directors, Jonathan Violin, Ph.D., a Quellis co-founder and President and Chief Executive Officer of Viridian Therapeutics, Inc., Fred Callori, a former Quellis Director, Senior Vice President Corporate Development at Xontogeny, LLC, and partner in the Perceptive Xontogeny Venture Fund, and current Catabasis Directors Joanne T. Beck, Ph.D., Hugh M. Cole, Michael D. Kishbauch, Gregg Lapointe and Jill C. Milne.

### **About the Transactions**

The acquisition of Quellis was structured as a stock-for-stock transaction whereby all outstanding equity interests of Quellis were exchanged in a merger for a combination of shares of Catabasis common stock and shares of Series X Preferred Stock. Concurrently with the acquisition of Quellis, Catabasis entered into definitive agreements for a PIPE investment with existing and new investors to raise approximately \$110 million in which the investors will be issued shares of Series X Preferred Stock at a price of approximately \$3,093 per share (or, \$3.09 per share on an as-converted-to-common basis). The PIPE offering is expected to close on February 1, 2021. Subject to stockholder approval, each share of Series X Preferred Stock initially will be convertible into 1,000 shares of Catabasis common stock, subject to certain beneficial ownership limitations set by each holder not to exceed 19.99%. The acquisition was approved by the Board of Directors of Catabasis and the stockholders of Quellis. The closing of the acquisition was not subject to the approval of Catabasis stockholders.



Ladenburg Thalmann & Co. Inc. is serving as exclusive financial advisor to Catabasis and Wilmer Cutler Pickering Hale and Dorr LLP is serving as legal counsel to Catabasis. Wedbush PacGrow is serving as exclusive strategic advisor to Quellis, and Gibson Dunn & Crutcher LLP is serving as legal counsel to Quellis. Jefferies LLC is acting as lead placement agent for the private placement. Cooley LLP is serving as legal counsel to the placement agent.

After completion of the acquisition and private placement financing, Catabasis expects to have cash, cash equivalents and short-term investments of approximately \$150 million and cash runway through 2023.

Additional details are available in an updated corporate presentation that can be found online at [www.catabasis.com](http://www.catabasis.com).

#### **Conference Call and Webcast Details**

Catabasis will host a conference call and webcast on January 29, 2021 at 9:00am ET to discuss the acquisition.

#### **Conference Call Dial-In Information:**

|   |                |
|---|----------------|
| Participant Toll-Free Dial-In Number:     | (877) 388-2733 |
| Participant International Dial-In Number: | (541) 797-2984 |
| Pass Code:                                | 9848493        |

Please specify to the operator that you would like to join the “Catabasis Pharmaceuticals Corporate Update Call.”

Interested parties may access a live audio webcast of the conference via the investor section of the Catabasis website, [www.catabasis.com](http://www.catabasis.com). Please connect to the Catabasis website several minutes prior to the start of the broadcast to ensure adequate time for any software download that may be necessary. The webcast will be archived for 90 days.

For more information on the acquisition, please visit the investor section of Catabasis’ website at [www.catabasis.com](http://www.catabasis.com).

#### **About Catabasis**

At Catabasis Pharmaceuticals, our mission is to bring hope with life-changing therapies to patients and families affected by rare diseases. Our lead program, QLS-215, is a potential best-in-class plasma kallikrein monoclonal antibody in preclinical development for the treatment of Hereditary Angioedema.

## Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, but not limited to, statements regarding: the closing of the private placement; the use of proceeds from the private placement; the projected cash runway; expectations regarding the timing for the filing of an IND and commencement and completion of clinical trials for QLS-215; the potential attributes of QLS-215; future product development plans; and stockholder approval of the conversion rights of the Series X preferred stock. The use of words such as, but not limited to, “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” or “would” and similar words expressions are intended to identify forward-looking statements. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our clinical results and other future conditions. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements. We may not actually achieve the forecasts or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Such forward-looking statements are subject to a number of material risks and uncertainties including but not limited to those set forth under the caption “Risk Factors” in Catabasis’ most recent Quarterly Report on Form 10-K filed with the SEC, as well as discussions of potential risks, uncertainties, and other important factors in our subsequent filings with the SEC. Any forward-looking statement speaks only as of the date on which it was made. Neither we, nor our affiliates, advisors or representatives, undertake any obligation to publicly update or revise any forward-looking statement, whether as result of new information, future events or otherwise, except as required by law. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date hereof.

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# Investor Presentation

January 2021



# Forward Looking Statements

This presentation and various remarks we make during this presentation contain forward-looking statements of Catabasis Pharmaceuticals, Inc. ("Catabasis," the "Company," "we", "our" or "us") within the meaning of the Private Securities Litigation Reform Act of 1995, including statements with respect to: future expectations, plans and prospects for Quellis Biosciences Inc. ("Quellis") and the combined company following the anticipated consummation of the merger transaction between the Company and Quellis (the "Merger"); the expected closing of the concurrent private placement; the initial market capitalization of the combined company and the benefits of the Merger, and the milestones of the combined company; the cash runway of the combined company; the potential timing for the filing of an IND; the status and plans for a Phase 1a and Phase 1b/2 clinical trial; and the potential commercial opportunity for QLS-215. We use words such as "anticipate," "believe," "estimate," "expect," "hope," "intend," "may," "plan," "predict," "project," "target," "potential," "would," "can," "could," "should," "continue," and other words and terms of similar meaning to help identify forward-looking statements, although not all forward-looking statements contain these identifying words. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including risks and uncertainties related to the ability to recognize the anticipated benefits of the Merger, the outcome of any legal proceedings that may be instituted against the Company or Quellis following the announcement of the Merger and related transactions; the ability to obtain or maintain the listing of the common stock of the combined company on The Nasdaq Stock Market following the Merger, costs related to the Merger, changes in applicable laws or regulations, the possibility that the Company or Quellis may be adversely affected by other economic, business, and/or competitive factors, including the COVID-19 pandemic; risks inherent in pharmaceutical research and development, such as: adverse results in our drug discovery, preclinical and clinical development activities, the risk that the results of pre-clinical studies may not be replicated in clinical studies, our ability to enroll patients in our clinical trials, and the risk that any of our clinical trials may not commence, continue or be completed on time, or at all; decisions made by the U.S. FDA and other regulatory authorities, investigational review boards at clinical trial sites and publication review bodies with respect to our development candidates; our ability to obtain, maintain and enforce intellectual property rights for our platform and development candidates; our potential dependence on collaboration partners; competition; our ability to obtain necessary financing to conduct our planned activities and to manage unplanned cash requirements; and general economic and market conditions; as well as the risks and uncertainties discussed in the "Risk Factors" section of the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2020, which is on file with the Securities and Exchange Commission, and in other filings that the Company may make with the Securities and Exchange Commission in the future. These forward-looking statements should not be relied upon as representing the Company's view as of any date subsequent to the date of this presentation, and we expressly disclaim any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

This presentation contains estimates and other statistical data made by independent parties and by us relating to market size and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data and estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

# Overview



## Our Mission

To bring hope with life-changing therapies to patients and families affected by rare diseases



## Our Lead Asset

QLS-215, a potential best-in-class chronic treatment for hereditary angioedema to prevent debilitating and sometimes life-threatening attacks



## Our Approach

Engineered a differentiated high affinity, long plasma half-life, humanized monoclonal antibody inhibitor of plasma kallikrein



## Our Near-term Value Drivers

Opportunity for clinical proof of concept for differentiated product in Phase 1

# Catabasis Acquisition of Quellis

## Transaction Summary

- Catabasis Pharmaceuticals, Inc. ("Catabasis," Nasdaq: CATB) has acquired Quellis Biosciences, Inc. ("Quellis")
  - Quellis is a preclinical virtual biotech company focused on improving the lives of patients with Hereditary Angioedema
  - Catabasis is a publicly-traded biotech company with expertise in rare disease discovery and clinical development
- Catabasis announced a concurrent PIPE financing of \$110M
  - The shares issued in the PIPE consist of convertible non-voting preferred stock
- Catabasis will seek stockholder approval of the conversion of the non-voting preferred stock into common stock
- On a post-conversion basis, common shares outstanding will be 109,494,006

## Premier Investors and Alignment of Interest

- Combined company has an experienced management team, leading healthcare investors and financial resources to continue development of QLS-215, a compelling asset for the treatment of HAE
- Shareholders of the combined company include Perceptive Advisors, Fairmount Funds, RA Capital Management, Cormorant Asset Management, Venrock Healthcare Capital Partners, Logos Capital, Boxer Capital, Acorn Bioventures, Commodore Capital, Surveyor Capital (a Citadel company), Acuta Capital Partners, Sphera Healthcare, and Serrado Capital LLC




## Use of Proceeds

- At closing of the transactions, the combined company will have approximately \$150 million in cash, cash equivalents and short-term investments
  - Proceeds expected to fund IND-enabling studies, Phase 1a, and Phase 1b/2 clinical trials for QLS-215 in HAE
  - Expected to support runway through 2023

## Key Management and Board

- Combined company led by Catabasis Chief Executive Officer, Jill C. Milne, Ph.D.
- 6 Directors from Catabasis: Ken Bate (Chairperson), Joanne T. Beck, Ph.D., Hugh M. Cole, Michael D. Kishbauch, Gregg Lapointe and Jill Milne, Ph.D. and 2 Directors from Quellis: Jonathan Violin, Ph.D., a Quellis co-founder, and Fred Callori, a former Quellis Director

# Hereditary Angioedema: A Rare, Potentially Life-Threatening Disease

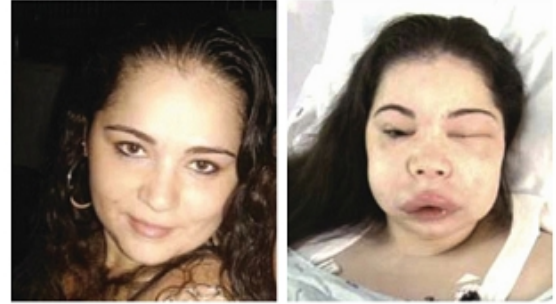
|  |  |
|--|--|
| <br><b>Disease Description</b>  | <ul style="list-style-type: none"><li>• Hereditary Angioedema (HAE) is a rare, autosomal dominant genetic disorder<sup>1</sup></li><li>• HAE is characterized by recurrent, unpredictable, debilitating and potentially life-threatening edema:<ul style="list-style-type: none"><li>○ Skin (hands, feet and face)</li><li>○ Abdomen</li><li>○ Throat/Airway<sup>2</sup></li></ul></li></ul> |
| <br><b>Disease Pathways</b>     | <ul style="list-style-type: none"><li>• Types I &amp; II comprise the majority of HAE cases and are caused by defects in the C1 inhibitor gene<sup>1</sup></li><li>• While rare, other mutations, including in the F12 gene, can cause HAE</li><li>• In HAE there is an overproduction of bradykinin, a key mediator of vasodilation and angioedema</li></ul>                                |
| <br><b>Patient Demographics</b> | <ul style="list-style-type: none"><li>• 1 in 10,000-50,000 people; &lt;8,000 people in the US<sup>3</sup></li><li>• Typically diagnosed ~20 years of age by allergist/ Immunologist</li><li>• Average age of onset 11 years<sup>4</sup>; estimated more than 8 years until definitive diagnosis<sup>5</sup></li></ul>  |

1. Busse PJ, et al. J Allergy Clin Immunol Pract 2021; 9(1):132-150.e3.
2. Zuraw BL. Hereditary angioedema. N Engl J Med. 2008;359:1027-36.
3. Lumry WR. Front. Med., 16 Feb 2019. doi:10.3389/fmed.2018.00022.
4. Bork K, et al. Am J Med. 2006;119:267-274.
5. Zuraw B et al. B. J. Haem. 2016.173(6):831-843.

# High Patient Burden: HAE Attacks are Unpredictable, Debilitating and Potentially Life-Threatening

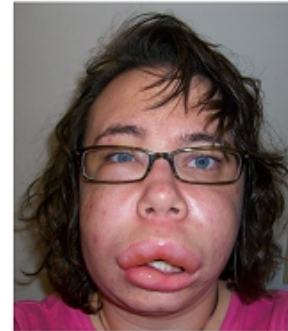
## Patient journey

- Patients typically present with symptoms to PCP or ER
- Low disease awareness among ER physicians and PCPs, although improving, limits referrals to allergists and HAE specialists for diagnosis
- Once diagnosed, most patients are prescribed treatment



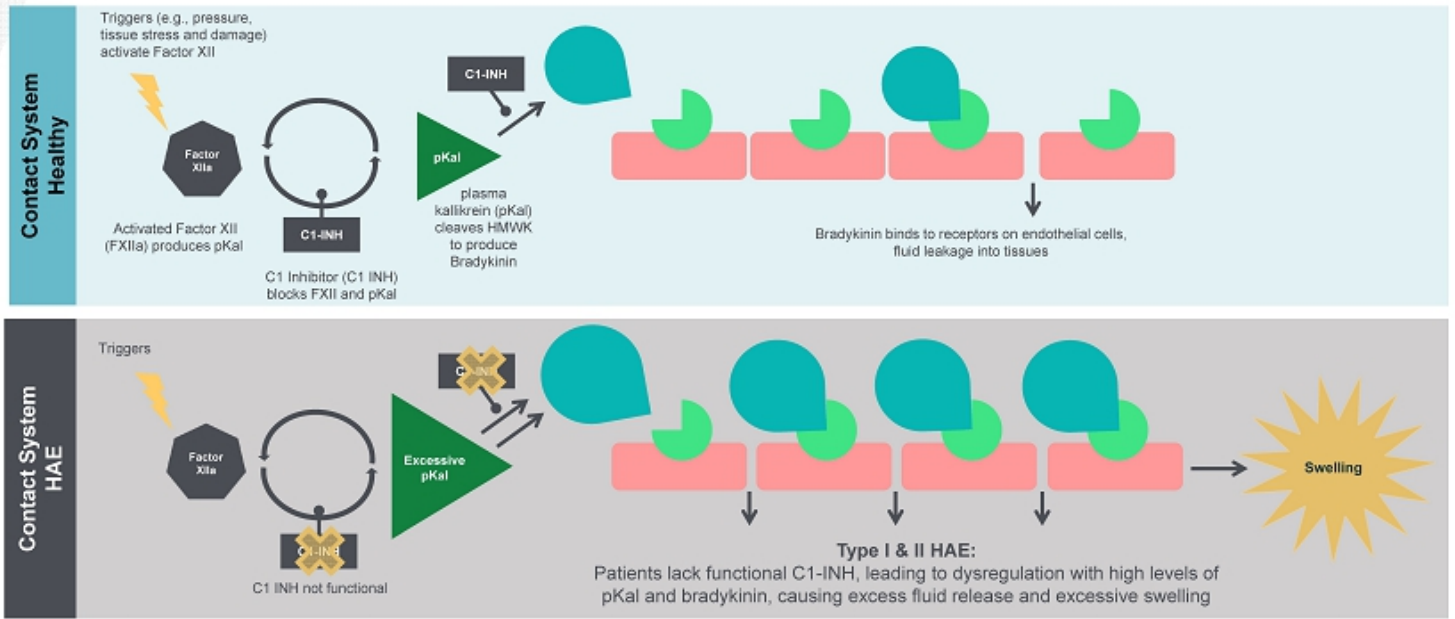
## Common triggers include:

- Physical activity with repeated pressure, excessive exposure to sun, cold, water
- Illness, emotional stress, hormonal fluctuations
- Medical/dental work
- Certain medications, food sensitivities





# Dysregulation of the Plasma Contact System Mediates Excessive Swelling Underlying HAE Symptoms



























# Treatment Landscape Has Advanced but Unmet Need Remains

Global market estimated to be >\$6.5B by 2025<sup>1</sup>

**Acute treatments** to limit severity and duration of attacks as they occur

**Prophylactic treatments** to prevent attacks

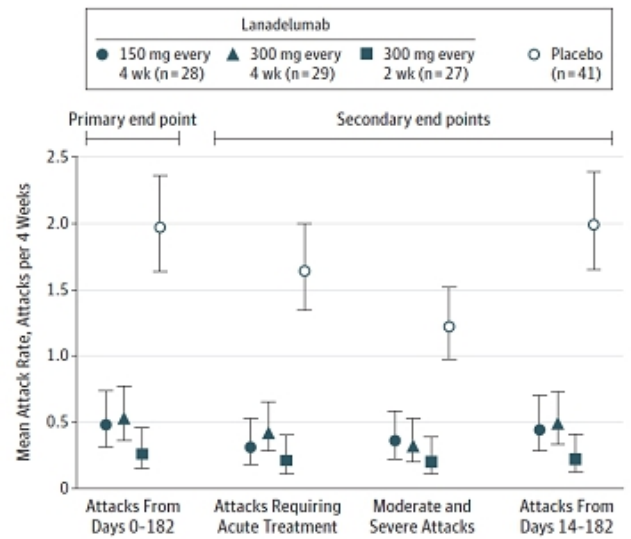
| Brand  | Company   | Mechanism of Action                                   | Admin.  | Dosing             |
|--|---|---|---|--------------------|
| <br>BERINEPT<br>C1 Esterase Inhibitor, Human  | <br>CSL Behring<br>Biotherapeutics for Life™ | Plasma derived C1 esterase inhibitor (pdC1-INH)       |  | As needed          |
| <br>firazyr<br>(icatibant injection)          | <br>Takeda                                   | B2 bradykinin receptor antagonist (synthetic peptide) |  | As needed          |
| <br>RUCONEST<br>(bimolecular)                 | <br>Pharming                                 | Recombinant C1 esterase inhibitor (rhC1-INH)          |  | As needed          |
| <br>KALBITOR<br>ecallantide                   | <br>Takeda                                   | Kallikrein inhibitor                                  |  | As needed (by HCP) |
| <br>CINRYZE<br>C1 esterase inhibitor (human)  | <br>Takeda                                   | pdC1-INH  |  | 2x/week            |
| <br>HAEGARDA<br>C1 esterase inhibitor (human) | <br>CSL Behring<br>Biotherapeutics for Life™ | pdC1-INH  |  | 2x/week            |
| <br>TAKHZYRO<br>(lanadelumab-lyyc) injection  | <br>Takeda                                   | Plasma kallikrein inhibitor (monoclonal antibody)     |  | Every 2 weeks      |
| <br>orladeyo<br>(benralstat) capsules 150 mg  | <br>biocryst                                 | Plasma kallikrein antagonist                          |  | 1x/day             |

Unmet need for prophylaxis that is more effective, less frequent, easier to administer

# TAKHZYRO® (lanadelumab-flyo) Injection Studies Have Established Plasma Kallikrein mAb as an Important Therapy for HAE

## Monoclonal antibody targeting pKal

- Prophylaxis to prevent HAE attacks in patients 12 years and older
- SC injection every 2 weeks. Dosing every 4 weeks may be considered in some patients.
- Most common AE in Phase 3 was injection site reaction (overall 52%)
- Shire acquired Dyax for \$5.9B after Phase 1b with lead program TAKHZYRO



Banerji, A., M.A. Riedl, et al. (2018) Effect of Lanadelumab Compared With Placebo on Prevention of Hereditary Angioedema Attacks: A Randomized Clinical Trial. JAMA 320(20):2108-2121.

<https://www.takhzyro.com/>

<https://www.prnewswire.com/news-releases/shire-to-acquire-dyax-corp-expanding-and-extending-industry-leading-hereditary-angioedema-hae-portfolio-539278541.html>

## QLS-215 mAb: Opportunity for Best-in-Class Agent

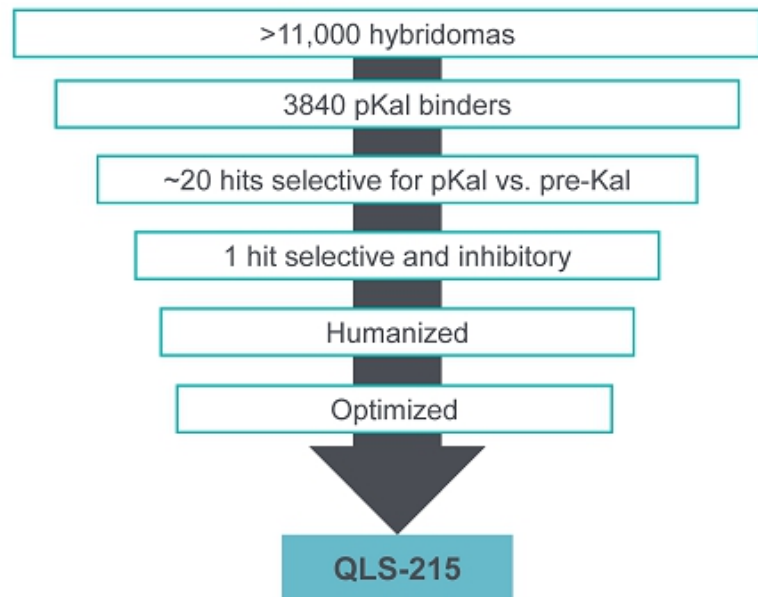
**Goal: Make the best possible pKal antibody to treat HAE with infrequent dosing and sustained blood levels**

| QLS-215 Goals   | Potential Benefits  |
|---|---|
| High potency for pKal   | <ul style="list-style-type: none"><li>• Long duration without breakthrough attacks</li><li>• Small injection volume</li></ul>     |
| Extended plasma half-life                                     | <ul style="list-style-type: none"><li>• Infrequent dosing</li><li>• Long duration without breakthrough attacks</li></ul>          |
| Clinical proof of concept                                     | <ul style="list-style-type: none"><li>• Early in development, establish differentiated product profile</li></ul>                  |
| Differentiated, best-in-class new therapy for HAE prophylaxis | <ul style="list-style-type: none"><li>• Trusted modality to provide patients with improved outcomes and quality of life</li></ul> |

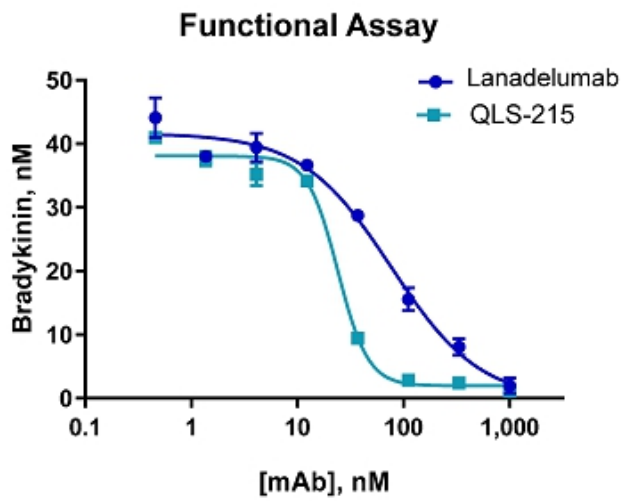
# QLS-215 Designed from Inception to be Potentially a Best-in-Class Prophylactic Therapy for Patients Affected by HAE

## Humanized monoclonal antibody having the following features:

- High affinity and selectivity for plasma kallikrein (pKal) versus pre-kallikrein (pre-Kal)
- Reduced immunogenicity and CMC liabilities
- Extended plasma half-life



## In an *in vitro* Functional Assay QLS-215 Was More Potent than Lanadelumab in Inhibiting Bradykinin Production

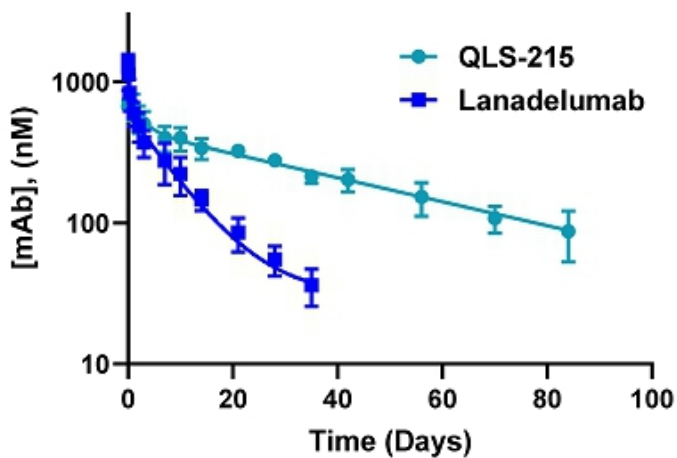


|                            | Lanadelumab | QLS-215 |
|----------------------------|-------------|---------|
| pKal IC <sub>90</sub> (nM) | 300         | 30      |

- IC<sub>90</sub> determined by bradykinin ELISA to detect cleavage of high molecular weight kininogen (600 nM) by pKal (30 nM)

# QLS-215 Has Shown Substantially Prolonged Plasma Half-Life Compared to Lanadelumab in Non-Human Primates

## PK in Non-Human Primates

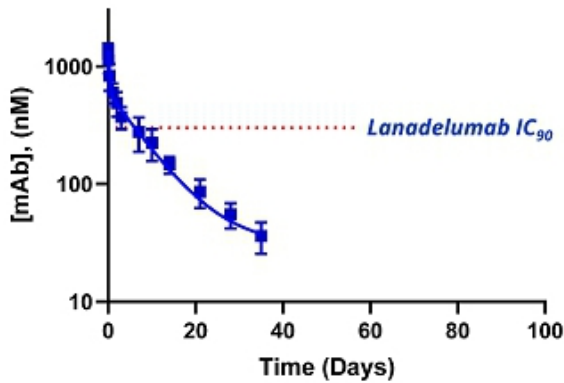


|                                   | Lanadelumab | QLS-215    |
|-----------------------------------|-------------|------------|
| Mean half-life ( $t_{1/2}$ ) (SD) | 10.5 (1.6)  | 33.6 (8.3) |

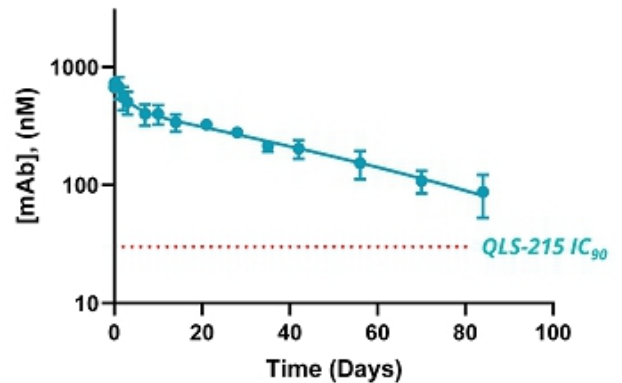
- FDA review documents: Lanadelumab  $t_{1/2}$  9.5-11.5 days in cynomolgus monkeys

# The *in vitro* Potency and NHP PK Data for QLS-215 Predict a Substantially Longer Duration of Action than Lanadelumab

Lanadelumab



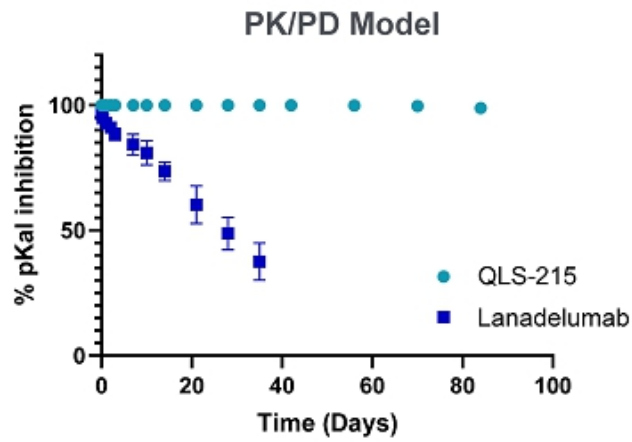
QLS-215



- Lanadelumab plasma levels fall below predicted minimum therapeutic concentration (IC90) by approximately **day 10**
- QLS-215 remains above predicted minimum therapeutic concentration (IC90) for **> 84 days**



# PK/PD Model from Preclinical Studies Predicts Longer Duration of Action for QLS-215



- Model based on plasma concentrations from cynomolgus PK studies and pKal inhibition determined in *in vitro* functional assay

## QLS-215 mAb Developed with the Desired Characteristics

**Goal: Make the best possible pKal antibody to treat HAE with infrequent dosing and sustained blood levels**

| QLS-215 Goals                    | Status |
|----------------------------------|--------|
| High potency for pKal            | ✓      |
| Extended plasma half-life in NHP | ✓      |
| Clinical proof of concept        |        |
| New therapy for HAE prophylaxis  |        |

# Opportunity for Proof of Concept in Early Clinical Trials

## Phase 1a Clinical Trial Design

- Subjects: Adult healthy volunteers
- Objectives: assess safety and PK
- Single escalating doses

### Goals

- Demonstrate safety and prolonged half-life as proof of concept in humans
- Determine activity with an *ex vivo* functional PD assay

## Phase 1b/2 Clinical Trial Design

- Subjects: Patients with Type I or II HAE
- Objectives: assess safety, PK and PD activity
- Multiple escalating doses

### Goals

- Demonstrate safety and prolonged half-life as proof of concept in patients
- Determine activity with PD assessments

## Estimated Timeline and Cash

- Cash, cash equivalents and short-term investments following closing of transactions will be approximately \$150M
- Expected cash runway through 2023

| 2021   | 2022  | 2023  |
|--|---|---|
| <b>QLS-215</b> <ul style="list-style-type: none"><li>• Conduct IND-enabling activities</li><li>• Initiate GMP manufacture</li><li>• Develop Phase 1a trial design</li><li>• Present preclinical data</li></ul> <b>Pipeline</b> <ul style="list-style-type: none"><li>• Advance undisclosed program</li><li>• Disclose rare disease program</li></ul> | <b>QLS-215</b> <ul style="list-style-type: none"><li>• Submit IND</li><li>• Initiate Phase 1a trial</li><li>• Initial Phase 1a results</li></ul> <b>Pipeline</b> <ul style="list-style-type: none"><li>• Conduct IND-enabling activities for rare disease program</li></ul> | <b>QLS-215</b> <ul style="list-style-type: none"><li>• Initiate Phase 1b/2 trial in HAE patients</li><li>• Initial Phase 1b/2 results</li></ul> |

## QLS-215 Opportunity



**Treatment for rare, genetic disease with established clinical and regulatory path**



**Targeting a clinically validated mechanism with a trusted modality**



**Potential for best-in-class agent that provides greater efficacy and ease of use**

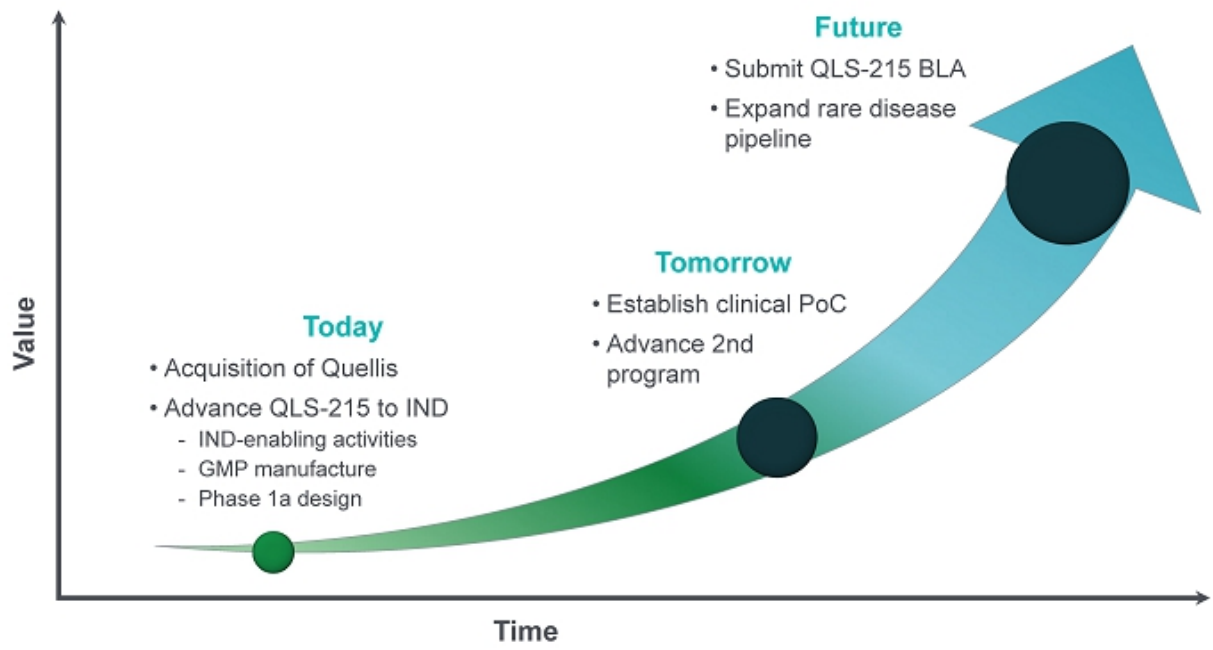


**Candidate with differentiated preclinical profile in predictive models**



**Potential to demonstrate clinical proof of concept for product profile in Phase 1**

# Vision for Catabasis





[catabasis.com](http://catabasis.com)

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