

U.S. SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): October 29, 2019 (October 29, 2019)

iBio, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or jurisdiction of incorporation or organization)

001-35023

(Commission File Number)

26-2797813

(I.R.S. Employer Identification Number)

600 Madison Avenue, Suite 1601, New York, NY 10022-1737

(Address of principal executive offices (Zip Code))

Registrant's telephone number: (302) 355-0650

N/A

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (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 (17CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17CFR 240.13e-4(c))

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).

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.

Emerging growth company

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

<u>Title of each class</u>	<u>Ticker symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock	IBIO	NYSE American

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

On October 29, 2019, iBio, Inc., a Delaware corporation (the “Company”), closed its previously announced public offering (the “Offering”) of (i) 2,450,000 shares (the “Shares”) of the Company’s common stock, par value \$0.001 per share (the “Common Stock”), (ii) 4,510 shares (the “Series C Preferred Shares”) of the Company’s newly designated Series C Convertible Preferred Stock, \$0.001 par value per share (the “Series C Preferred Stock”), (iii) 25,000,000 Series A warrants (the “Series A Warrants”) to purchase shares of the Company’s Common Stock and (iv) 25,000,000 Series B warrants (the “Series B Warrants”) to purchase shares of the Company’s Common Stock.

Each Share of Common Stock was sold together with two warrants, one Series A Warrant with an expiry date on the second anniversary of the original issuance date to purchase one share of Common Stock and one Series B Warrant with an expiry date on the seventh anniversary of the original issuance date, to purchase one share of Common Stock. In addition, each of Series C Preferred Share was sold together with Series A Warrants to purchase one share of Common Stock for each share of Common Stock issuable upon conversion of the Series C Preferred Share and Series B Warrants to purchase one share of Common Stock for each share of Common Stock issuable upon conversion of the Series C Preferred Share (the Series A Warrants and Series B Warrants are referred to in this Current Report on Form 8-K as “Warrants”).

Each Share of Common Stock and accompanying Warrants was sold at a combined public offering price of \$0.20 and each Series C Preferred Share and accompanying Warrants was sold at a combined public offering price of \$1,000.

The Shares, Series C Preferred Shares and Warrants were issued pursuant to an underwriting agreement, dated October 25, 2019, entered into between the Company and A.G.P./Alliance Global Partners, as the sole underwriter, a copy of which is included as Exhibit 1.1 to this Current Report on Form 8-K and incorporated herein by reference.

The net proceeds to the Company from the sale of the Shares, Series C Preferred Shares, and Warrants was approximately \$4.52 million, after deducting underwriting discounts and commissions and other offering expenses payable by the Company.

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

On October 28, 2019, the Company filed with the Secretary of State of the State of Delaware a certificate of designation of preferences, rights and limitations of the Series C Preferred Stock (the “Series C Certificate of Designation”), establishing the rights, preferences, privileges, qualifications, restrictions, and limitations relating to its Series C Preferred Stock. The Series C Certificate of Designation became effective with the Secretary of State of the State of Delaware upon filing. A copy of the Series C Certificate of Designation is included in Exhibits 3.1 to this Current Report on Form 8-K and is incorporated herein by reference.

**Item 9.01 Financial Statements and Exhibits.**

Exhibit No.	Description
<a href="#">1.1</a>	<a href="#">Underwriting Agreement, dated October 25, 2019, by and between iBio, Inc. and A.G.P./Alliance Global Partners *</a>
<a href="#">3.1</a>	<a href="#">Certificate of Designation, Preferences and Rights of the Series C Convertible Preferred Stock of iBio, Inc.*</a>

\*Filed herewith.

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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.

Date: October 29, 2019

**IBIO, INC.**

By: /s/ Robert B. Kay  
Robert B. Kay  
Executive Chairman and CEO

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**UNDERWRITING AGREEMENT**

between

**IBIO, INC.**

and

**A.G.P./ALLIANCE GLOBAL PARTNERS,****as Representative of the Several Underwriters****IBIO, INC.****UNDERWRITING AGREEMENT**New York, New York  
October 25, 2019

A.G.P./Alliance Global Partners  
As Representative of the several Underwriters named on Schedule 1 attached hereto  
590 Madison Avenue, 36<sup>th</sup> Floor  
New York, New York 10022

Ladies and Gentlemen:

The undersigned, iBio, Inc., a Delaware corporation (the “**Company**”), hereby confirms its agreement (this “**Agreement**”) with A.G.P./Alliance Global Partners (hereinafter referred to as “**you**” (including its correlatives) or the “**Representative**”) and with the other underwriters named on Schedule 1 hereto for which the Representative is acting as representative (the Representative and such other underwriters being collectively called the “**Underwriters**” or, individually, an “**Underwriter**”) as follows:

**1. Purchase and Sale of Securities****1.1 Firm Securities****1.1.1. Nature and Purchase of Securities**

(i) On the basis of the representations and warranties herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell to the several Underwriters, an aggregate of 2,450,000 shares (the “**Firm Shares**”) of the Company’s common stock, par value \$0.001 per share (the “**Common Stock**”), an aggregate of 4,510 shares of Series C Convertible Preferred Stock, par value \$0.001 per share (the “**Preferred Shares**”), which are convertible into an aggregate of 22,550,000 shares of Common Stock (the “**Conversion Shares**”), which shall have a stated value of \$1,000 per share and shall have a conversion price of \$0.20, subject to adjustment as provided in the Certificate of Designation, Preferences and Rights of the Preferred Shares (the “**Certificate of Designation**”), an aggregate of 25,000,000 Series A Common Stock purchase warrants, which shall have an exercise price of \$0.22 (the “**Series A Warrants**”) to purchase up to an aggregate of 25,000,000 shares of Common Stock, and an aggregate of 25,000,000 Series B Common Stock purchase warrants (the “**Series B Warrants**”) to purchase up to an aggregate of 25,000,000 shares of Common Stock, which shall have an exercise price of \$0.22. The Series A Warrants and Series B Warrants are collectively referred herein as the “**Firm Warrants**” and the shares of Common Stock underlying the Firm Warrants are collectively referred to herein as the “**Warrant Shares**.” The Firm Shares, the Preferred Shares and the Firm Warrants are collectively referred to herein as the “**Firm Securities**.” The Firm Shares and the Conversion Shares are collectively referred to herein as the “**Shares**.”

(ii) The Underwriters, severally and not jointly, agree to purchase from the Company the number of Firm Securities set forth opposite their respective names on Schedule 1 attached hereto and made a part hereof at a purchase price (a) of \$0.1841 per share of Common Stock (93% of the per Firm Share offering price), \$929.9981 per Preferred Share (93% of the per Preferred Share offering price), and \$0.0009 per Series A Warrant (93% of the per Series A Warrant offering price) and \$0.0009 per Series B Warrant (93% of the per Series B Warrant offering price) with respect to investors set forth on Schedule 1 attached hereto who do not have a pre-existing relationship with the Company, and (b) \$0.1911 per share of Common Stock (96.5% of the per Firm Share offering price), \$964.9981 per Preferred Share (96.5% of the per Preferred Share offering price), and \$0.0009 per Series A Warrant (96.5% of the per Series A Warrant offering price) and \$0.0009 per Series B Warrant (96.5% of the per Series B Warrant offering price) with respect to investors set forth on Schedule 1 attached hereto who have a pre-existing relationship with the Company (the “**Pre-Existing Relationship Investors**”). The Firm Securities are to be offered initially to the public at the offering price set forth on the cover page of the Prospectus (as defined in Section 2.1.1 hereof).

1.1.2. **Firm Securities Payment and Delivery.**

(i) Delivery and payment for the Firm Securities shall be made at 10:00 a.m., Eastern time, on the second (2nd) Business Day following the effective date (the “**Effective Date**”) of the Registration Statement (as defined in Section 2.1.1 below) under the Securities Act of 1933, as amended (the “**Securities Act**”) (or the third (3rd) Business Day following the Effective Date if the pricing for the Offering (as defined in Section 2.1.1 below) occurs after 4:01 p.m., Eastern time on the Effective Date) or at such earlier time as shall be agreed upon by the Representative and the Company, at the offices of Zysman, Aharoni, Gayer and Sullivan & Worcester LLP, 1633 Broadway, New York, New York, 10019 (“**Representative Counsel**”), or at such other place (or remotely by facsimile or other electronic transmission) as shall be agreed upon by the Representative and the Company. The hour and date of delivery and payment for the Firm Securities is called the “**Closing Date**.”

(ii) Payment for the Firm Securities shall be made on the Closing Date by wire transfer in Federal (same day) funds, payable to the order of the Company upon delivery of the Firm Securities via the Depository Trust Company (“**DTC**”). The Firm Securities shall be registered in such name or names and in such authorized denominations as the Representative may request in writing at least two (2) full Business Days prior to the Closing Date. The Company shall not be obligated to sell or deliver the Firm Securities except upon tender of payment by the Representative for all of the Firm Securities. The aggregate purchase price for the Securities to be purchased by each of the Underwriters shall equal up to the amount set forth opposite the name of such Underwriter on Schedule 1 attached hereto, provided that to the extent any Underwriter sells fewer Securities and therefore determines to purchase fewer Securities, such amount shall be reduced on a pro rata basis based on the number of Securities actually purchased. The Underwriters shall notify the Company of the number of Securities they intend to purchase at the Closing Date on the business day immediately preceding the Closing Date, provided that such notification shall not be binding upon the Underwriters. The term “**Business Day**” means any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions are authorized or obligated by law to close in New York, New York.

1.2 **Over-allotment Option.**

1.2.1. **Option Securities.** For the purposes of covering any over-allotments in connection with the distribution and sale of the Firm Securities, the Company hereby grants to the Underwriters an option (the “**Over-Allotment Option**”) to purchase up to an additional 3,750,000 shares of Common Stock, representing fifteen percent (15%) of the Shares sold in the offering, from the Company (the “**Option Shares**”), and/or (b) warrants to purchase up to 7,500,000 shares of Common Stock, representing fifteen percent (15%) of the Firm Warrants sold in the offering (the “**Option Warrants**” and collectively with the Option Shares, the “**Option Securities**”). The purchase price to be paid per Option Security shall be equal to the price per applicable Firm Security set forth in Section 1.1.1 hereof. The shares of Common Stock underlying the Firm Warrants and the Option Warrants are hereinafter referred to as the “**Registered Warrant Shares**”. The Firm Securities, the Conversion Shares, the Registered Warrant Shares and the Option Securities are hereinafter referred to together as the “**Public Securities**.” The offering and sale of the Public Securities is hereinafter referred to as the “**Offering**.”

1.2.2. **Exercise of Option.** The Over-allotment Option granted pursuant to Section 1.2.1 hereof may be exercised by the Representative as to all (at any time) or any part (from time to time) of the Option Securities within forty-five (45) days after the date of the Prospectus (as defined below). The Underwriters shall not be under any obligation to purchase any Option Securities prior to the exercise of the Over-allotment Option. The Over-allotment Option granted hereby may be exercised by the giving of oral notice to the Company from the Representative, which must be confirmed in writing by overnight mail or facsimile or other electronic transmission setting forth the number of Option Securities to be purchased and the date and time for delivery of and payment for the Option Securities (the “**Option Closing Date**”), which shall not be later than five (5) full Business Days after the date of the notice or such other time as shall be agreed upon by the Company and the Representative, at the offices of Representative Counsel, or at such other place (including remotely by facsimile or other electronic transmission) as shall be agreed upon by the Company and the Representative. If such delivery and payment for the Option Securities does not occur on the Closing Date, the Option Closing Date will be as set forth in the notice. Upon exercise of the Over-allotment Option with respect to all or any portion of the Option Securities, subject to the terms and conditions set forth herein, (i) the Company shall become obligated to sell to the Underwriters the number of Option Securities specified in such notice and (ii) each of the Underwriters, acting severally and not jointly, shall purchase that portion of the total number of Option Securities then being purchased as set forth in Schedule 1 opposite the name of such Underwriter.

1.2.3. **Payment and Delivery.** Payment for the Option Securities shall be made on the Option Closing Date by wire transfer in Federal (same day) funds, payable to the order of the Company upon delivery to you of certificates (in form and substance satisfactory to the Underwriters) representing the Option Securities (or through the facilities of DTC) for the account of the Underwriters. The Option Securities shall be registered in such name or names and in such authorized denominations as the Representative may request in writing at least two (2) full Business Days prior to the Option Closing Date. The Company shall not be obligated to sell or deliver the Option Securities except upon tender of payment by the Representative for applicable Option Securities.

2. **Representations and Warranties of the Company.** The Company represents and warrants to the Underwriters as of the Applicable Time (as defined below), as of the Closing Date and as of the Option Closing Date, as follows:

2.1 **Filing of Registration Statement**

2.1.1. **Pursuant to the Securities Act.** The Company has filed with the U.S. Securities and Exchange Commission (the “**Commission**”) a registration statement, and an amendment or amendments thereto, on Form S-1 (File No. 333-233504), including any related prospectus or prospectuses, for the registration of the sale of Public Securities under the Securities Act, which registration statement and amendment or amendments have been prepared by the Company in all material respects in conformity with the requirements of the Securities Act and the rules and regulations of the Commission promulgated thereunder (the “**Securities Act Regulations**”) and contains and will contain all material statements that are required to be stated therein in accordance with the Securities Act and the Securities Act Regulations. Except as the context may otherwise require, such registration statement, as amended, on file with the Commission at the time the registration statement became effective (including the Preliminary Prospectus included in the registration statement, financial statements, schedules, exhibits and all other documents filed as a part thereof or incorporated therein and all information deemed to be a part thereof as of the Effective Date pursuant to paragraph (b) of Rule 430A of the Securities Act Regulations (the “**Rule 430A Information**”)), is referred to herein as the “**Registration Statement**.” If the Company files any registration statement pursuant to Rule 462(b) of the Securities Act Regulations, then after such filing, the term “**Registration Statement**” shall include such registration statement filed pursuant to Rule 462(b) The Registration Statement has been declared effective by the Commission on the date hereof.

Each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted the Rule 430A Information that was used after such effectiveness and prior to the execution and delivery of this Agreement, is herein called a “**Preliminary Prospectus**.” The Preliminary Prospectus, subject to completion, dated October 23, 2019, which was included in the Registration Statement immediately prior to the Applicable Time is hereinafter called the “**Pricing Prospectus**.” The final prospectus in the form first furnished to the Underwriters for use in the Offering is hereinafter called the “**Prospectus**.” Any reference to the “**most recent Preliminary Prospectus**” shall be deemed to refer to the latest Preliminary Prospectus included in the Registration Statement.

“**Applicable Time**” means 9:00 p.m., Eastern Time, on the date of this Agreement.

“**Issuer Free Writing Prospectus**” means any “issuer free writing prospectus,” as defined in Rule 433 of the Securities Act Regulations (“Rule 433”), including without limitation any “free writing prospectus” (as defined in Rule 405 of the Securities Act Regulations) relating to the Public Securities that is (i) required to be filed with the Commission by the Company, (ii) a “road show that is a written communication” within the meaning of Rule 433(d)(8)(i), whether or not required to be filed with the Commission, or (iii) exempt from filing with the Commission pursuant to Rule 433(d)(5)(i) because it contains a description of the Public Securities or of the Offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g).

“**Issuer General Use Free Writing Prospectus**” means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors (other than a *bona fide* electronic road show,” as defined in Rule 433), as evidenced by its being specified in Schedule 2-B hereto.

“**Issuer Limited Use Free Writing Prospectus**” means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

“**Pricing Disclosure Package**” means any Issuer General Use Free Writing Prospectus issued at or prior to the Applicable Time, the Pricing Prospectus and the information included on Schedule 2-A hereto, all considered together.

2.1.2. **Pursuant to the Exchange Act.** The shares of Common Stock are registered pursuant to Section 12(b) under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”). The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the shares of Common Stock under the Exchange Act, nor has the Company received any notification that the Commission is contemplating terminating such registration.

2.2 *Intentionally omitted.*

2.3 **No Stop Orders, etc.** Neither the Commission nor, to the Company’s knowledge, any state regulatory authority has issued any order preventing or suspending the use of the Registration Statement, any Preliminary Prospectus or the Prospectus or has instituted or, to the Company’s knowledge, threatened to institute, any proceedings with respect to such an order. The Company has complied with each request (if any) from the Commission for additional information.

2.4 **Stock Exchange Listing.** The shares of Common Stock are listed on NYSE American LLC (the “**NYSE**” or the “**Exchange**”), and the Company has taken no action designed to, or likely to have the effect of delisting the shares of Common Stock from the NYSE, nor has the Company received any notification that the NYSE is contemplating terminating such listing. Except as otherwise disclosed in the Registration Statement and the Prospectus, to the Company’s knowledge, it is in compliance with all applicable listing requirements of the NYSE. The Company has submitted the Listing of Additional Shares Notification Form with the Exchange with respect to the Offering of the Public Securities.

2.5 **Prior Securities Transactions.** Since May 13, 2014, no securities of the Company have been sold by the Company or by or on behalf of, or for the benefit of, any person or persons controlling, controlled by or under common control with the Company, except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

2.6 **Regulations.** The disclosures in the Registration Statement, the Pricing Disclosure Package and the Prospectus concerning the effects of federal, state, local and all foreign regulation on the Offering and the Company's business as currently contemplated are correct in all material respects and no other such regulations are required to be disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus which are not so disclosed.

2.7 **No Other Distribution of Offering Materials.** The Company has not, directly or indirectly, distributed and will not distribute any offering material in connection with the Offering other than any Preliminary Prospectus, the Prospectus and other materials, if any, permitted under the Securities Act and consistent with Section 3.2 below.

2.8 **Independent Accountants.** To the knowledge of the Company, CohnReznick LLP (the "Auditor"), whose report is filed with the Commission and included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, is an independent registered public accounting firm as required by the Securities Act and the Securities Act Regulations and the Public Company Accounting Oversight Board. The Auditor has not, during the periods covered by the financial statements included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, provided to the Company any non-audit services, as such term is used in Section 10A(g) of the Exchange Act.

2.9 **Changes After Dates in Registration Statement.**

2.9.1. **No Material Adverse Change.** Since the respective dates as of which information is given in the Registration Statement, the Pricing Disclosure Package and the Prospectus, except as otherwise specifically stated therein: (i) there has been no material adverse change in the financial position or results of operations of the Company or any of its subsidiaries, nor any change or development that, singularly or in the aggregate, would involve a material adverse change in or affecting the condition (financial or otherwise), results of operations, business, assets or prospects of the Company or any subsidiary (a "**Material Adverse Change**"); (ii) there have been no material transactions entered into by the Company, other than as contemplated pursuant to this Agreement; and (iii) no officer or director of the Company has resigned from any position with the Company.

2.9.2. **Recent Securities Transactions, etc.** Subsequent to the respective dates as of which information is given in the Registration Statement, the Pricing Disclosure Package and the Prospectus, and except as may otherwise be indicated or contemplated herein or disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company has not: (i) issued any securities, other than shares of Common Stock issuable upon the exercise or conversion of then outstanding options, warrants and/or convertible securities, or incurred any liability or obligation, direct or contingent, for borrowed money; or (ii) declared or paid any dividend or made any other distribution on or in respect to its capital stock.



2.10 **Disclosures in Registration Statement.**

2.10.1. **Compliance with Securities Act and 10b-5 Representation**

(i) Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the requirements of the Securities Act and the Securities Act Regulations. Each Preliminary Prospectus, including the prospectus filed as part of the Registration Statement as originally filed or as part of any amendment or supplement thereto, and the Prospectus, at the time each was filed with the Commission, complied in all material respects with the requirements of the Securities Act and the Securities Act Regulations. Each Preliminary Prospectus delivered to the Underwriters for use in connection with this Offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(ii) Neither the Registration Statement nor any amendment thereto, at its effective time, as of the Applicable Time, at the Closing Date, and as of the Option Closing Date, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading.

(iii) The Pricing Disclosure Package, as of the Applicable Time, at the Closing Date, or at any Option Closing Date (if any) did not, does not and will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and each Issuer Limited Use Free Writing Prospectus hereto does not conflict with the information contained in the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, and each such Issuer Limited Use Free Writing Prospectus, as supplemented by and taken together with the Prospectus as of the Applicable Time, did not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; provided however, that this representation and warranty shall not apply to statements made or statements omitted in reliance upon and in conformity with written information furnished to the Company with respect to the Underwriters by the Representative expressly for use in the Registration Statement, the Pricing Prospectus, the Pricing Disclosure Package or the Prospectus or any amendment thereof or supplement thereto. The parties acknowledge and agree that such information provided by or on behalf of any Underwriter consists solely of the following disclosure: (a) the names of the Underwriters contained on the cover page of the Pricing Prospectus and Prospectus, (b) the information set forth under the sub-captions “Underwriting Discounts and Commissions,” “Price Stabilization, Short Positions and Penalty Bids,” “Electronic Distribution,” “Passive Market Making,” “Other Relationships” and “Sales Outside the United States” and (c) the table showing the number of securities to be purchased by each Underwriter (the “**Underwriters’ Information**”).

(iv) Neither the Prospectus nor any amendment or supplement thereto (including any prospectus wrapper), as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Date, or at any Option Closing Date (if any), included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to the Underwriters’ Information; and

(v) The documents incorporated by reference in the Registration Statement, the Pricing Prospectus, the Pricing Disclosure Package and the Prospectus, when they became effective or were filed with the Commission, as the case may be, conformed in all material respects to the requirements of the Securities Act or the Exchange Act, as applicable, and the rules and regulations of the Commission thereunder and none of such documents contained any untrue statement of a material fact or omitted to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and any further documents so filed and incorporated by reference in the Registration Statement, the Pricing Prospectus, the Pricing Disclosure Package and the Prospectus, when such documents become effective or are filed with the Commission, as the case may be, will conform in all material respects to the requirements of the Securities Act or the Exchange Act, as applicable, and the rules and regulations of the Commission thereunder, and 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 light of the circumstances under which they were made, not misleading.

2.10.2. **Disclosure of Agreements.** The agreements and documents described in the Registration Statement, the Pricing Disclosure Package and the Prospectus conform in all material respects to the descriptions thereof contained or incorporated by reference therein, and there are no agreements or other documents required by the Securities Act and the Securities Act Regulations to be described in the Registration Statement, the Pricing Disclosure Package and the Prospectus or to be filed with the Commission as exhibits to the Registration Statement or to be incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, that have not been so described or filed or incorporated by reference. Each agreement or other instrument (however characterized or described) to which the Company is a party or by which it is or may be bound or affected and (i) that is referred to or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, or (ii) is material to the Company's business, has been duly authorized and validly executed by the Company, is in full force and effect in all material respects and is enforceable against the Company and, to the Company's knowledge, the other parties thereto, in accordance with its terms, except (x) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally, (y) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws, and (z) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought. None of such agreements or instruments has been assigned by the Company, and neither the Company nor, to the Company's knowledge, any other party is in default thereunder and, to the Company's knowledge, no event has occurred that, with the lapse of time or the giving of notice, or both, would constitute a default thereunder except for a default or event which would not reasonably be expected to result in a Material Adverse Effect (as such term is defined in Section 2.10.3 below). To the best of the Company's knowledge, performance by the Company of the material provisions of such agreements or instruments will not result in a violation of any existing applicable law, rule, regulation, judgment, order or decree of any governmental agency or court, domestic or foreign, having jurisdiction over the Company or any of its assets or businesses (each, a "**Governmental Entity**"), including, without limitation, those relating to environmental laws and regulations.

2.10.3. **Organization and Qualification.** The Company is an entity duly incorporated or otherwise organized, validly existing, and, if applicable under the laws of the jurisdiction in which it is formed, in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. The Company has all necessary authorizations, approvals, orders, licenses, certificates and permits of and from all governmental regulatory officials and bodies that it needs as of the date hereof to conduct its business purpose in all material respects as described in the Registration Statement and SEC Reports and to own or lease its properties. The Company is not in violation nor default of any of the provisions of its certificate of incorporation, as amended (the "**Charter**"), first amended and restated bylaws (the "**Bylaws**") or other organizational or charter documents. The Company is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of this Agreement, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under this Agreement (any of (i), (ii) or (iii), a "**Material Adverse Effect**") and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification. Each of the Company's subsidiaries has been duly organized and is validly existing as and is in good standing under the laws of the applicable state of organization/incorporation as of the date hereof, and each of the Company's subsidiaries duly qualified to do business and is in good standing in each other jurisdiction in which its ownership or lease of property or the conduct of business requires such qualification, except where the failure to qualify, singularly or in the aggregate, would not have or reasonably be expected to result in a Material Adverse Effect.

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

2.10.5. **No Conflicts.** The execution, delivery and performance and filing by the Company of this Agreement and the Certificate of Designation, as applicable, the issuance and sale of the Public Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Charter, Bylaws or other organizational or charter documents, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company, or give to others any rights of termination, amendment, anti-dilution or similar adjustments, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company debt or otherwise) or other understanding to which the Company is a party or by which any property or asset of the Company is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company is subject (including, without limitation, those promulgated by the Food and Drug Administration of the U.S. Department of Health and Human Services (the "FDA") or by any foreign, federal, state or local regulatory authority performing functions similar to those performed by the FDA, and federal and state securities laws and regulations), or by which any property or asset of the Company is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

2.10.6. **Filings, Consents and Approvals.** Except as otherwise disclosed in the Registration Statement and the Prospectus, the Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of this Agreement and the Certificate of Designation, other than: (i) the filing with the Commission of the Prospectus Supplement, (ii) application(s) to each applicable Exchange for the listing of the applicable Public Securities for trading thereon in the time and manner required thereby and (iii) filing the Certificate of Designation with the Delaware Secretary of State (collectively, the “**Required Approvals**”).

2.10.7. **D&O Questionnaires.** To the Company’s knowledge, all information contained in the questionnaires (the “**Questionnaires**”) completed by each of the Company’s directors and officers immediately prior to the Offering (the “**Insiders**”) as supplemented by all information concerning the Company’s directors, officers and principal shareholders as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, as well as in the Lock-Up Agreement (as defined in Section 2.10.45 below), provided to the Underwriters, is true and correct in all material respects and the Company has not become aware of any information which would cause the information disclosed in the Questionnaires to become materially inaccurate and incorrect.

2.10.8. **Issuance of the Public Securities: Registration.** The Public Securities are duly authorized and, when issued and paid for in accordance with this Agreement and the Certificate of Designation, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Warrant Shares and the Conversion Shares are duly authorized and, when issued in accordance with the terms of the Warrants and the Certificate of Designation, as applicable, will be validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Company has reserved from its duly authorized capital stock the maximum number of shares of Common Stock issuable pursuant to this Agreement and the Certificate of Designation, as applicable.

2.10.9. **Capitalization.** The equity capitalization of the Company is as set forth in the Registration Statement and the Prospectus under the caption “Capitalization” (other than for subsequent issuances, if any, pursuant to employee benefit plans, or upon the exercise of outstanding options or warrants, in each case described in the Registration Statement and the Prospectus). No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by this Agreement and the Certificate of Designation. Except as set forth in the Registration Statement and the Prospectus, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock, or contracts, commitments, understandings or arrangements by which the Company is or may become bound to issue additional shares of Common Stock. Except as described in the Registration Statement and the Prospectus, the issuance and sale of the Securities will not obligate the Company to issue shares of Common Stock or other securities to any Person (other than the Underwriters) 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. There are no outstanding securities or instruments of the Company that contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company is or may become bound to redeem a security of the Company. The Company does not have any stock appreciation rights or “phantom stock” plans or agreements or any similar plan or agreement. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws where applicable, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. Except for the Required Approvals, no further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Public Securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company’s capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company’s stockholders.

2.10.10. **SEC Reports: Financial Statements** The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the one year preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, together with the Prospectus and the Prospectus Supplement, being collectively referred to herein as the “SEC Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The financial statements of the Company included in the SEC Reports, including the notes thereto and supporting schedules included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, complied in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements fairly present in all material respects the financial position and the results of operations of the Company at the dates and for the periods to which they apply and have been prepared in accordance with generally accepted accounting principles applied on a consistent basis during the periods involved, except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by generally accepted accounting principles (“GAAP”), and fairly present in all material respects the financial position of the Company as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments. Except as included or incorporated by reference therein, no historical or pro forma financial statements are required to be included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package or the Prospectus under the Securities Act or the Securities Act Regulations. All disclosures contained in the Registration Statement, the Pricing Disclosure Package or the Prospectus regarding “non-GAAP financial measures” (as such term is defined by the rules and regulations of the Commission), if any, comply in all material respects with Regulation G of the Exchange Act and Item 10 of Regulation S-K of the Securities Act, to the extent applicable. Each of the Registration Statement, the Pricing Disclosure Package and the Prospectus discloses all material off-balance sheet transactions, arrangements, obligations (including contingent obligations), and other relationships of the Company with unconsolidated entities or other persons that may have a material current or future effect on the Company’s financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources, or significant components of revenues or expenses. Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, (a) the Company has not incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions other than in the ordinary course of business, (b) the Company has not declared or paid any dividends or made any distribution of any kind with respect to its capital stock, (c) there has not been any change in the capital stock of the Company or, other than in the ordinary course of business, any grants under any stock compensation plan, and (d) there has not been any Material Adverse Change in the Company’s long-term or short-term debt.

2.10.11. **Material Changes; Undisclosed Events, Liabilities or Developments** Since the date of the latest audited financial statements included within the SEC Reports, except as specifically disclosed in a subsequent SEC Report filed prior to the date hereof, (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) (A) the Company nor any of its officers, directors or Affiliates, as defined under Rule 405 of the Securities Act, has engaged in any discussions with any other party relating to a potential merger or other similar type of transaction (a “**Transaction**”), (B) no party has contacted the Company to express an interest in conducting a Transaction with the Company and there is no pending, foreseeable, prospective or imminent Transaction involving the Company and the Company has not entered into any agreement to conduct a Transaction within the next six (6) months and (C) the Company has not retained or conducted a search for any broker, investment bank or other advisor to assist with any Transaction and the Company and its officers, directors and Affiliates have no immediate plans to engage any such advisor, (iii) the Company has not incurred any liabilities (contingent or otherwise) that are material, individually or in the aggregate, to the Company, or has entered into any transactions not in the ordinary course of business other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company’s financial statements pursuant to generally accepted accounting principles or disclosed in filings made with the Commission, (iv) the Company has not altered its method of accounting, (v) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (vi) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company stock option plans. The Company does not have pending before the Commission any request for confidential treatment of information.

2.10.12. **Litigation**. Except as set forth in the Registration Statement, Pricing Disclosure Package and Prospectus, there is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its subsidiaries or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an “**Action**”) which (i) adversely affects or challenges the legality, validity or enforceability of any of this Agreement and the Certificate of Designation, or the Public Securities, or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Except as set forth in the Registration Statement, Pricing Disclosure Package and Prospectus, neither the Company, its subsidiaries, nor any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty, which could result in a Material Adverse Effect. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company under the Exchange Act or the Securities Act.

2.10.13. **Labor Relations**. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company’s employees is a member of a union that relates to such employee’s relationship with the Company, and the Company is not a party to a collective bargaining agreement, and the Company believes that its relationships with its employees are good. To the knowledge of the Company, no executive officer of the Company, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company to any liability with respect to any of the foregoing matters. The Company is in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

2.10.14. **Compliance.** The Company: (i) is and at all times has been in compliance in all material respects with all statutes, rules, or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export, storage or disposal of any product manufactured or distributed by the Company (“**Applicable Laws**”), except as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; (ii) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from the FDA or any other governmental authority alleging or asserting noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws (“**Authorizations**”); (iii) possesses all material Authorizations and such Authorizations are valid and in full force and effect and are not in material violation of any term of any such Authorizations; (iv) has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority or third party alleging that any product operation or activity is in violation of any Applicable Laws or Authorizations and have no knowledge that any such governmental authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding, except as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; (v) has not received written notice that any governmental authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations and have no knowledge that any such governmental authority is considering such action, except as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; and (vi) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct in all material respects on the date filed (or were corrected or supplemented by a subsequent submission).

2.10.15. **Environmental Laws.** The Company (i) is in material compliance with all material federal, state, local and foreign laws relating to pollution or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, “**Hazardous Materials**”) into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands, or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations, issued, entered, promulgated or approved thereunder (“**Environmental Laws**”); (ii) has received all permits licenses or other approvals required of them under applicable Environmental Laws for their respective businesses; and (iii) is in compliance with all terms and conditions of any such permit, license or approval where in each clause (i), (ii) and (iii), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect.

2.10.16. **Regulatory Permits.** The Company possesses all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect (“**Material Permits**”), and the Company has not received any notice of proceedings relating to the revocation or modification of any Material Permit.

2.10.17. **Title to Assets.** The Company has good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company is held by it under valid, subsisting and enforceable leases with which the Company is in compliance in all material respects. The Company has not received any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or its subsidiaries to the continued possession of the leased or subleased premises under any such lease or sublease, which would result in a Material Adverse Effect.

2.10.18. **Intellectual Property.** The Company and its subsidiaries own or possess or have valid rights to use all patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, copyrights, licenses, inventions, trade secrets and similar rights (“**Intellectual Property Rights**”) necessary for the conduct of the business of the Company as currently carried on and as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus. To the Company’s knowledge, no action or use by the Company necessary for the conduct of its business as currently carried on and as described in the Registration Statement and the Prospectus will involve or give rise to any infringement of, or license or similar fees for, any Intellectual Property Rights of others. The Company has not received any notice alleging any such infringement, fee or conflict with asserted Intellectual Property Rights of others. Except as would not reasonably be expected to result, individually or in the aggregate, in a Material Adverse Effect or as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus (A) to the knowledge of the Company there is no infringement, misappropriation or violation by third parties of any of the Intellectual Property Rights owned by the Company; (B) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the rights of the Company in or to any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim, that would, individually or in the aggregate, together with any other claims in this Section 2.34, reasonably be expected to result in a Material Adverse Effect; (C) the Intellectual Property Rights owned by the Company and the Intellectual Property Rights licensed to the Company have not been adjudged by a court of competent jurisdiction invalid or unenforceable, in whole or in part, and there is no pending or threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim that would, individually or in the aggregate, together with any other claims in this Section 2.34, reasonably be expected to result in a Material Adverse Effect; (D) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others that the Company infringes, misappropriates or otherwise violates any Intellectual Property Rights or other proprietary rights of others, the Company has not received any written notice of such claim and the Company is unaware of any other facts which would form a reasonable basis for any such claim that would, individually or in the aggregate, together with any other claims in this Section 2.10.18, reasonably be expected to result in a Material Adverse Effect; and (E) to the Company’s knowledge, no employee of the Company is in or has ever been in violation in any material respect of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee’s employment with the Company, or actions undertaken by the employee while employed with the Company and could reasonably be expected to result, individually or in the aggregate, in a Material Adverse Effect. To the Company’s knowledge, all material technical information developed by and belonging to the Company which has not been patented has been kept confidential. The Company is not a party to or bound by any options, licenses or agreements with respect to the Intellectual Property Rights of any other person or entity that are required to be set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus and are not described therein. The Registration Statement, the Pricing Disclosure Package and the Prospectus contain in all material respects the same description of the matters set forth in the preceding sentence. None of the technology employed by the Company has been obtained or is being used by the Company in violation of any contractual obligation binding on the Company or, to the Company’s knowledge, any of its officers, directors or employees, or otherwise in violation of the rights of any persons.



2.10.19. **Insurance.** The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company is engaged, including, but not limited to, directors and officers insurance coverage. The Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

2.10.20. **Transactions With Affiliates and Employees.** Except as set forth in the Registration Statement, none of the officers or directors of the Company and, to the knowledge of the Company, none of the employees of the Company is presently a party to any transaction with the Company (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company. There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees or indebtedness by the Company or any of its subsidiaries to or for the benefit of any of the officers or directors of the Company, or any of their respective family members, except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

2.10.21. **Contracts Affecting Capital.** There are no transactions, arrangements or other relationships between and/or among the Company, its subsidiaries, any of its affiliates (as such term is defined in Rule 405 of the Securities Act Regulations) and any unconsolidated entity, including, but not limited to, any structured finance, special purpose or limited purpose entity that could reasonably be expected to materially affect the Company's or its subsidiaries' liquidity or the availability of or requirements for its capital resources required to be described or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus which have not been described or incorporated by reference as required.

2.10.22. **Ineligible Issuer.** At the time of filing the Registration Statement and any post-effective amendment thereto, at the time of effectiveness of the Registration Statement and any amendment thereto, at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) of the Securities Act Regulations) of the Securities and at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer.

2.10.23. **Sarbanes-Oxley: Internal Accounting Controls.** The Company is in material compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of the Closing Date. The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company has established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company as of the end of the period covered by the most recently filed Form 10-K under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed Form 10-K under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company.

2.10.24. **Certain Fees.** Except as set forth in the Prospectus Supplement, no brokerage or finder's fees or commissions are or will be payable by the Company to any broker, financial advisor or consultant, finder, Underwriter, investment banker, bank or other Person with respect to the transactions contemplated by this Agreement and the Certificate of Designation. Other than for Persons engaged by any Underwriter, if any, the Underwriters 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 that may be due in connection with the transactions contemplated by this Agreement and the Certificate of Designation. Other than the Underwriter, no person has the right to act as an underwriter or as a financial advisor to the Company in connection with the transactions contemplated hereby.

2.10.25. **Investment Company.** The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Public Securities, will not be or be an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an "investment company" subject to registration under the Investment Company Act of 1940, as amended.

2.10.26. **Registration Rights.** Except as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus, no Person has any right to cause the Company to effect the registration under the Securities Act of any securities of the Company.

2.10.27. **Listing and Maintenance Requirements.** The shares of Common Stock are registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the shares of Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. Except with respect to Section 1003(a)(iii) of the NYSE American Company Guide as disclosed in the Registration Statement, the Company has not, in the 12 months preceding the date hereof, received notice from the Exchange on which the shares of Common Stock are or have been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Exchange. Except as disclosed in the Registration Statement, the Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements. The shares of Common Stock are currently eligible for electronic transfer through The Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees to The Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer.

2.10.28. **Transactions Affecting Disclosure to FINRA.**

(i) **Finder's Fees.** Except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there are no claims, payments, arrangements, agreements or understandings relating to the payment of a finder's, consulting or origination fee by the Company or any Insider with respect to the sale of the Public Securities hereunder or any other arrangements, agreements or understandings of the Company or, to the Company's knowledge, any of its stockholders that may affect the Underwriters' compensation, as determined by FINRA.

(ii) **Payments Within Twelve (12) Months.** Except as described in the Registration Statement, the Pricing Disclosure Package, or the Prospectus, the Company has not made any direct or indirect payments (in cash, securities or otherwise) to: (i) any person, as a finder's fee, consulting fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who raised or provided capital to the Company; (ii) any FINRA member; or (iii) any person or entity that has any direct or indirect affiliation or association with any FINRA member, within the twelve (12) months prior to the date of this Agreement, other than the payment to the Underwriters as provided hereunder in connection with the Offering.

(iii) **Use of Proceeds.** None of the net proceeds of the Offering will be paid by the Company to any participating FINRA member or its affiliates, except as specifically authorized herein.

(iv) **FINRA Affiliation.** Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there is no (i) officer or director of the Company, or, to the Company's knowledge (ii) beneficial owner of 5% or more of any class of the Company's securities or (iii) beneficial owner of the Company's unregistered equity securities that were acquired during the 180-day period immediately preceding the filing of the Registration Statement that is an affiliate or associated person of a FINRA member participating in the Offering (as determined in accordance with the rules and regulations of FINRA).

(v) **Information.** All information provided by the Company in its FINRA questionnaire to Representative Counsel specifically for use by Representative Counsel in connection with its Public Offering System filings (and related disclosure) with FINRA is true, correct and complete in all material respects.

2.10.29. **Disclosure.** Except with respect to the material terms and conditions of the transactions contemplated by this Agreement and the Certificate of Designation, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Underwriters or their agents or counsel with any information that it believes constitutes or might constitute material, non-public information which is not otherwise disclosed in the Prospectus Supplement. The Company understands and confirms that the Underwriters will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Underwriters regarding the Company, their respective businesses and the transactions contemplated hereby, is true and correct in all material respects and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. The press releases disseminated by the Company during the twelve months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made and when made, not misleading. The Company acknowledges and agrees that no Underwriter makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.2 hereof.

2.10.30. **Industry Data.** The statistical and market-related data included in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus are based on or derived from sources that the Company reasonably and in good faith believes are reliable and accurate or represent the Company's good faith estimates that are made on the basis of data derived from such sources, and the Company has obtained the written consent to the use of such data from sources to the extent required.

2.10.31. **Forward-Looking Statements.** No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Registration Statement, the Pricing Disclosure Package or the Prospectus has been made or reaffirmed by the Company without a reasonable basis or has been disclosed by the Company other than in good faith.

2.10.32. **No Integrated Offering.** Assuming the accuracy of the Underwriters' representations and warranties related thereto, neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this offering of the Public Securities to be integrated with prior offerings by the Company for purposes of (i) the Securities Act, or (ii) any applicable shareholder approval provisions of the Exchange on which any of the securities of the Company are listed or designated.

2.10.33. **Margin Securities.** The Company owns no "margin securities" as that term is defined in Regulation U of the Board of Governors of the Federal Reserve System (the "Federal Reserve Board"), and none of the proceeds of Offering will be used, directly or indirectly, for the purpose of purchasing or carrying any margin security, for the purpose of reducing or retiring any indebtedness which was originally incurred to purchase or carry any margin security or for any other purpose which might cause any of the shares of Common Stock to be considered a "purpose credit" within the meanings of Regulation T, U or X of the Federal Reserve Board.

2.10.34. **Subsidiaries.** The Companies subsidiaries are iBio Manufacturing LLC, iBIO DO BRASIL BIOFARMACÊUTICA LTDA. and iBio CDMO LLC.

2.10.35. **Tax Status.** Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company (i) has made or filed all United States federal, state and local income and all foreign tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provisions shown on the financial statements filed with or as part of the Registration Statement which are reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim. Except as disclosed in writing to the Underwriters, (i) no issues have been raised (and are currently pending) by any taxing authority in connection with any of the returns or taxes asserted as due from the Company, and (ii) no waivers of statutes of limitation with respect to the returns or collection of taxes have been given by or requested from the Company. There are no tax liens against the assets, properties or business of the Company. The term "**taxes**" means all federal, state, local, foreign and other net income, gross income, gross receipts, sales, use, ad valorem, transfer, franchise, profits, license, lease, service, service use, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall profits, customs, duties or other taxes, fees, assessments or charges of any kind whatever, together with any interest and any penalties, additions to tax or additional amounts with respect thereto. The term "**returns**" means all returns, declarations, reports, statements and other documents required to be filed in respect to taxes.

2.10.36. **ERISA Compliance.** The Company, its subsidiaries, and any “employee benefit plan” (as defined under the Employee Retirement Income Security Act of 1974, as amended, and the regulations and published interpretations thereunder (collectively, “ERISA”)) established or maintained by the Company, its subsidiaries, or their respective “ERISA Affiliates” (as defined below) are in compliance in all material respects with ERISA. “ERISA Affiliate” means, with respect to the Company, any member of any group of organizations described in Sections 414(b),(c),(m) or (o) of the Internal Revenue Code of 1986, as amended, and the regulations and published interpretations thereunder (the “Code”) of which the Company is a member. No “reportable event” (as defined under ERISA) has occurred or is reasonably expected to occur with respect to any “employee benefit plan” established or maintained by the Company, its subsidiaries, or any of their respective ERISA Affiliates. No “employee benefit plan” established or maintained by the Company, subsidiaries, or any of their respective ERISA Affiliates, if such “employee benefit plan” were terminated, would have any “amount of unfunded benefit liabilities” (as defined under ERISA). Neither the Company, its subsidiaries, nor any of their respective ERISA Affiliates has incurred or reasonably expects to incur any material liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any “employee benefit plan” or (ii) Sections 412, 4971, 4975 or 4980B of the Code. Each “employee benefit plan” established or maintained by the Company, its subsidiaries, or any of their respective ERISA Affiliates that is intended to be qualified under Section 401(a) of the Code is so qualified and, to the Company’s knowledge, nothing has occurred, whether by action or failure to act, which would cause the loss of such qualification.

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

2.10.38. **Accountants.** The Company’s independent registered public accounting firm is as set forth in the Prospectus. To the knowledge and belief of the Company, such accounting firm (i) is a registered public accounting firm as required by the Exchange Act and (ii) shall express its opinion with respect to the financial statements to be included in the Company’s Annual Report on Form 10-K for the fiscal year ended June 30, 2019.

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

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

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

2.10.42. **FDA.** As to each product subject to the jurisdiction of the FDA or any non-U.S. counterpart that is manufactured, packaged, labeled, tested and/or distributed by the Company (each such product, a "**Product**"), such Product is being manufactured, packaged, labeled, tested and/or distributed by the Company in compliance with all applicable Health Care Laws relating to registration, investigational use, licensure, or application approval, good manufacturing practices, good laboratory practices, good clinical practices, product listing, quotas, labeling, advertising, record keeping and filing of reports, except where the failure to be in compliance would not have a Material Adverse Effect. There is no pending, completed or, to the Company's knowledge, threatened, action (including any lawsuit, arbitration, or legal or administrative or regulatory proceeding, charge, complaint, or investigation) against the Company, and of the Company has not received any notice, warning letter or other communication from the FDA or any other governmental entity, which (i) contests the licensure, registration, or approval of, the uses of, the distribution of, the manufacturing or packaging of, the testing of, the sale of, or the labeling and promotion of any Product, (ii) withdraws its approval of, requests the recall, suspension, or seizure of, or withdraws or orders the withdrawal of advertising or sales promotional materials relating to, any Product, (iii) except as set forth in the Registration Statement and Prospectus, imposes a clinical hold on any clinical investigation by the Company, (iv) enjoins production at any facility of the Company, (v) enters or proposes to enter into a consent decree of permanent injunction with the Company, or (vi) otherwise alleges any violation of any Health Care Laws by the Company, and which, either individually or in the aggregate, would have a Material Adverse Effect. The properties, business and operations of the Company have been and are being conducted in all material respects in accordance with all applicable Health Care Laws. The Company has not been informed by the FDA or any non-U.S. counterpart that the FDA or any non-U.S. counterpart will prohibit the marketing, sale, license or use in the United States or in any other territory any product proposed to be developed, produced or marketed by the Company nor has the FDA or any non-U.S. counterpart expressed any concern as to approving or clearing for marketing any product being developed or proposed to be developed by the Company. To the Company's knowledge, there are no legal or governmental proceedings relating to any Health Care Law pending or threatened to which the Company is a party, nor is it aware of any material violations of such acts or regulations by the Company, which would have a Material Adverse Effect. For purposes of this Agreement, "**Health Care Laws**" means: (i) the Federal Food, Drug, and Cosmetic Act and the regulations promulgated thereunder; (ii) all applicable federal, state, local and all applicable foreign health care related fraud and abuse laws, including, without limitation, the U.S. Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the U.S. Physician Payment Sunshine Act (42 U.S.C. § 1320a-7h), the U.S. Civil False Claims Act (31 U.S.C. Section 3729 et seq.), the criminal False Claims Law (42 U.S.C. § 1320a-7b(a)), all criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. Sections 286 and 287, and the health care fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 ("**HIPAA**") (42 U.S.C. Section 1320d et seq.), the exclusion laws (42 U.S.C. § 1320a-7), the civil monetary penalties law (42 U.S.C. § 1320a-7a), the statutes, regulations and directives of applicable government funded or sponsored healthcare programs, and the regulations promulgated pursuant to such statutes; (iii) the Standards for Privacy of Individually Identifiable Health Information (the "**Privacy Rule**"), the Security Standards, and the Standards for Electronic Transactions and Code Sets promulgated under HIPAA, the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), and the regulations promulgated thereunder and any state or non-U.S. counterpart thereof or other law or regulation the purpose of which is to protect the privacy of individuals or prescribers; (iv) Medicare (Title XVIII of the Social Security Act); (v) Medicaid (Title XIX of the Social Security Act); and (vi) any and all other applicable health care laws and regulations.

2.10.43. **Research Studies and Trials** The research studies and trials conducted by or on behalf of, or sponsored by, the Company, or in which the Company has participated, that are described in the Registration Statement, Pricing Disclosure Package or the Prospectus, or the results of which are referred to in the Registration Statement, Pricing Disclosure Package or the Prospectus, as applicable, were and, if still pending, are being, conducted in all material respects in accordance with applicable experimental protocols, procedures and controls pursuant to, where applicable, accepted professional and scientific standards for products or product candidates comparable to those being developed by the Company and all applicable statutes, rules and regulations of the FDA and other comparable drug and medical device regulatory agencies to which they are subject; the Company has no knowledge of any research studies or trials not described in the Registration Statement, Pricing Disclosure Package or the Prospectus the results of which reasonably call into question in any material respect the results of the research studies and trials described in the Registration Statement, Pricing Disclosure Package or the Prospectus; and except as described in the Registration Statement or Prospectus the Company has not received any written notices or correspondence from the FDA or any other foreign, state or local governmental body exercising comparable authority or any institutional review board or comparable authority requiring, suggesting or threatening the premature termination, suspension, material modification or clinical hold of any research studies or trials conducted by or on behalf of, or sponsored by, the Company or in which the Company has participated that are described in the Registration Statement, Pricing Disclosure Package or the Prospectus, and, to the Company's knowledge, there are no reasonable grounds for the same. The descriptions in the Registration Statement, the Pricing Disclosure Package, and the Prospectus of the results of such studies are accurate and complete in all material respects and fairly present the data derived from such studies, and to the Company's knowledge there is no large well-controlled clinical study the aggregate results of which are inconsistent with or otherwise call into question the results of any clinical study conducted by or on behalf of the Company that are described in the Registration Statement, the Pricing Disclosure Package, and the Prospectus or the results of which are referred to in the Registration Statement, the Pricing Disclosure Package, and the Prospectus. Except as disclosed in the Registration Statement, the Pricing Disclosure Package, and the Prospectus the Company has not received any written notices or statements from the FDA or any other governmental agency that, (i) any investigational new drug application for potential product of the Company is or has been rejected or determined to be non-approvable or conditionally approvable; and (ii) any license, approval, permit or authorization to conduct any clinical trial of any potential product of the Company has been, will be or may be suspended, revoked, modified or limited. There has not been any violation of applicable law by the Company in its product development efforts, submissions or reports to any regulatory authority that could reasonably be expected to require investigation, corrective action or enforcement action, except where such violation would not, singly or in the aggregate, result in a Material Adverse Effect.

2.10.44. **Office of Foreign Assets Control.** Neither the Company nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("**OFAC**") and the Company will not, directly or indirectly, use the proceeds of the Offering hereunder, 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 currently subject to any U.S. sanctions administered by OFAC.

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

2.10.46. **Bank Holding Company Act.** Neither the Company nor to its knowledge any of its Affiliates is subject to the Bank Holding Company Act of 1956, as amended (the "**BHCA**") and to regulation by the Board of Governors of the Federal Reserve System (the "**Federal Reserve**"). Neither the Company nor to its knowledge any of its Affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor to its knowledge any of its Affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

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

2.10.48. **PFIC Status.** The Company does not believe it is a Passive Foreign Investment Company ("**PFIC**") within the meaning of Section 1296 of the United States Internal Revenue Code of 1986, as amended, and does not believe it is likely to become a PFIC.

2.10.49. **Stamp or Other Tax.** No stamp or other issuance or transfer taxes or duties and no capital gains, income, withholding or other taxes are payable by or on behalf of the Placements Agents or any Underwriter to any political subdivision or taxing authority thereof or therein in connection with the sale and delivery by the Company of the Public Securities to or for the sale and delivery by Public Securities to the Underwriters.

2.10.50. **Lock-Up Agreements.** Schedule 3 hereto contains a complete and accurate list of the Company's officers and directors (collectively, the "**Lock-Up Parties**"). The Company has caused each of the Lock-Up Parties to deliver to the Representative an executed Lock-Up Agreement, in the form attached hereto as Exhibit A (the "**Lock-Up Agreement**"), prior to the execution of this Agreement.



2.10.51. **Related Party Transactions.**

(i) **Business Relationships.** There are no business relationships or related party transactions involving the Company or any other person required to be described in the Registration Statement, the Pricing Disclosure Package and the Prospectus that have not been described as required.

(ii) **No Relationships with Customers and Suppliers.** No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company, or any of the Company's affiliates, on the other hand, which is required to be described in the Pricing Disclosure Package and the Prospectus or a document incorporated by reference therein and which is not so described.

(iii) **No Unconsolidated Entities.** There are no transactions, arrangements or other relationships between and/or among the Company, its subsidiaries, or any of their affiliates (as such term is defined in Rule 405 of the Securities Act) and any unconsolidated entity, including, but not limited to, any structured finance, special purpose or limited purpose entity that could reasonably be expected to materially affect the Company's liquidity or the availability of or requirements for its capital resources required to be described in the Pricing Disclosure Package and the Prospectus or a document incorporated by reference therein which have not been described as required.

(iv) **No Loans or Advances to Affiliates.** There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees or indebtedness by the Company or its subsidiaries to or for the benefit of any of the officers or directors of the Company or any of their respective family members, except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

2.10.52. **Integration.** Neither the Company, nor any of its affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the Offering to be integrated with prior offerings by the Company for purposes of the Securities Act that would require the registration of any such securities under the Securities Act.

2.10.53. **Board of Directors.** The Board of Directors of the Company is comprised of the persons set forth under the heading of the Pricing Prospectus and the Prospectus or documents incorporated therein by reference captioned "Management." The qualifications of the persons serving as board members and the overall composition.

2.10.54. **General.** Any certificate signed by any duly authorized officer of the Company and delivered to you or to Representative Counsel shall be deemed a representation and warranty by the Company to the Underwriters as to the matters covered thereby.

2.10.55. **Minute Books.** The minute books of the Company have been made available to the Underwriters and counsel for the Underwriters, and such books (i) contain a complete summary of all meetings and actions of the board of directors (including each board committee) and stockholders of the Company (or analogous governing bodies and interest holders, as applicable), since the time of its incorporation or organization through the date of the latest meeting and action, and (ii) accurately in all material respects reflect all transactions referred to in such minutes. There are no material transactions, agreements, dispositions or other actions of the Company that are not properly approved and/or accurately and fairly recorded in the minute books of the Company, as applicable.

2.10.56. **Confidentiality and Non-Competition.** To the Company's knowledge, no director, officer, key employee or consultant of the Company is subject to any confidentiality, non-disclosure, non-competition agreement or non-solicitation agreement with any employer or prior employer that could reasonably be expected to materially affect his ability to be and act in his respective capacity of the Company or be expected to result in a Material Adverse Effect.

2.10.57. **Insider Transactions.** All transactions by the Company with office holders or control persons of the Company have been duly approved by the board of directors of the Company, or duly appointed committees or officers thereof, if and to the extent required under applicable law.

2.10.58. **Shell Status.** The Company is not presently and has not been an issuer identified as a “Shell” company.

2.10.59. **Promotional Stock Activities.** Neither the Company, its subsidiaries, the officers of the Company or its subsidiaries, or any affiliates or agents of the Company or its subsidiaries have engaged in any stock promotional activity that could give rise to a complaint or inquiry by the Commission alleging (i) a violation of the anti-fraud provisions of the federal securities laws, (ii) violations of the anti-touting provisions, (iii) improper “gun-jumping”, or (iv) promotion without proper disclosure of compensation.

3. **Covenants of the Company.** The Company covenants and agrees as follows:

3.1 **Amendments to Registration Statement.** The Company shall deliver to the Representative, prior to filing, any amendment or supplement to the Registration Statement, the Preliminary Prospectus, the Pricing Disclosure Package or Prospectus proposed to be filed after the date of this Agreement and not file any such amendment or supplement to which the Representative shall reasonably object in writing.

3.2 **Federal Securities Laws.**

3.2.1. **Compliance.** The Company, subject to Section 3.2.2, shall comply with the requirements of Rule 424(b) and Rule 430A, and will notify the Representative promptly, and confirm the notice in writing, (i) when any post-effective amendment to the Registration Statement or any amendment or supplement to any Preliminary Prospectus, the Pricing Disclosure Package or the Prospectus shall have been filed and when any post-effective amendment to the Registration Statement shall become effective; (ii) of the receipt of any comments from the Commission; (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to any Preliminary Prospectus, the Pricing Disclosure Package or the Prospectus, including any document incorporated or deemed to be incorporated by reference therein, or for additional information; (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment or of any order preventing or suspending the use of any Preliminary Prospectus, the Pricing Disclosure Package or the Prospectus, or of the suspension of the qualification of the Public Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(d) or 8(e) of the Securities Act concerning the Registration Statement and (v) if the Company becomes the subject of a proceeding under Section 8A of the Securities Act in connection with the Offering of the Public Securities. The Company shall effect all filings required under Rule 424(b) of the Securities Act Regulations, in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and shall take such steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company shall use its best efforts to prevent the issuance of any stop order, prevention or suspension and, if any such order is issued, to obtain the lifting thereof at the earliest possible moment.

3.2.2. **Continued Compliance.** The Company shall comply with the Securities Act, the Securities Act Regulations, the Exchange Act and the Exchange Act Regulations so as to permit the completion of the distribution of the Public Securities as contemplated in this Agreement and in the Registration Statement, the Pricing Disclosure Package and the Prospectus. If at any time when a prospectus relating to the Public Securities is (or, but for the exception afforded by Rule 172 of the Securities Act Regulations (“**Rule 172**”), would be) required by the Securities Act to be delivered in connection with sales of the Public Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Underwriters or for the Company, to (i) amend the Registration Statement in order that the Registration Statement will not include 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 not misleading; (ii) amend or supplement the Pricing Disclosure Package or the Prospectus in order that the Pricing Disclosure Package or the Prospectus, as the case may be, will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser or (iii) amend the Registration Statement or amend or supplement the Pricing Disclosure Package or the Prospectus, as the case may be, in order to comply with the requirements of the Securities Act or the Securities Act Regulations, the Company will promptly (A) give the Representative notice of such event; (B) prepare any amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement, the Pricing Disclosure Package or the Prospectus comply with such requirements and, a reasonable amount of time prior to any proposed filing or use, furnish the Representative with copies of any such amendment or supplement and (C) file with the Commission any such amendment or supplement; provided that the Company shall not file or use any such amendment or supplement to which the Representative or counsel for the Underwriters shall reasonably object. The Company will furnish to the Underwriters such number of copies of such amendment or supplement as the Underwriters may reasonably request. The Company has given the Representative notice of any filings made pursuant to the Exchange Act or the Exchange Act Regulations within 48 hours prior to the Applicable Time. The Company shall give the Representative notice of its intention to make any such filing from the Applicable Time until the later of the Closing Date and the exercise in full or expiration of the Over-allotment Option specified in Section 1.2 hereof and will furnish the Representative with copies of the related document(s) a reasonable amount of time prior to such proposed filing, as the case may be, and will not file or use any such document to which the Representative or counsel for the Underwriters shall reasonably object.

3.3 **Delivery to the Underwriters of Registration Statements.** The Company has delivered or made available or shall deliver or make available to the Representative and counsel for the Representative, without charge, signed copies of the Registration Statement as originally filed and each amendment thereto (including exhibits filed therewith or incorporated by reference therein and documents incorporated or deemed to be incorporated by reference therein) and signed copies of all consents and certificates of experts, and will also deliver to the Underwriters, without charge, a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) for each of the Underwriters. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

3 . 4 **Delivery to the Underwriters of Prospectuses.** The Company has delivered or made available or will deliver or make available to each Underwriter, without charge, as many copies of each Preliminary Prospectus as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the Securities Act. The Company will furnish to each Underwriter, without charge, during the period when a prospectus relating to the Public Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the Securities Act, such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

3 . 5 **Events Requiring Notice to the Representative.** The Company shall use its commercially reasonable best efforts to cause the Registration Statement to remain effective with a current prospectus for at least nine (9) months after the Applicable Time, and shall notify the Representative immediately and confirm the notice in writing: (i) of the issuance by the Commission of any stop order or of the initiation, or the threatening, of any proceeding for that purpose; (ii) of the issuance by any state securities commission of any proceedings for the suspension of the qualification of the Public Securities for offering or sale in any jurisdiction or of the initiation, or the threatening, of any proceeding for that purpose; (iii) of the mailing and delivery to the Commission for filing of any amendment or supplement to the Registration Statement or Prospectus; (iv) of the receipt of any comments or request for any additional information from the Commission; and (v) of the happening of any event during the period described in this Section 3.5 that, in the judgment of the Company, makes any statement of a material fact made in the Registration Statement, the Pricing Disclosure Package or the Prospectus untrue or that requires the making of any changes in (a) the Registration Statement in order to make the statements therein not misleading, or (b) in the Pricing Disclosure Package or the Prospectus in order to make the statements therein, in light of the circumstances under which they were made, not misleading. If the Commission or any state securities commission shall enter a stop order or suspend such qualification at any time, the Company shall make every reasonable effort to obtain promptly the lifting of such order.

3 . 6 **Exchange Act Registration.** For a period of three (3) years after the date of this Agreement, the Company shall use its commercially reasonable best efforts to maintain the registration of the shares of Common Stock under the Exchange Act. The Company shall not deregister the shares of Common Stock under the Exchange Act without the prior written consent of the Representative, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this section shall not restrict a sale, merger or similar transaction involving the Company; provided, however, that the Company has not and is not undertaking, discussing or contemplating any such action, as described in Section 2.10.11 herein, that has not been brought to the attention of the Representative.

3 . 7 **Free Writing Prospectuses.** The Company agrees that, unless it obtains the prior written consent of the Representative, it shall not make any offer relating to the Public Securities that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a “free writing prospectus,” or a portion thereof, required to be filed by the Company with the Commission or retained by the Company under Rule 433; provided, however, that the Representative shall be deemed to have consented to each Issuer General Use Free Writing Prospectus hereto and any “road show that is a written communication” within the meaning of Rule 433(d)(8)(i) that has been reviewed by the Representative. The Company represents that it has treated or agrees that it will treat each such free writing prospectus consented to, or deemed consented to, by the Underwriters as an “issuer free writing prospectus,” as defined in Rule 433, and that it has complied and will comply with the applicable requirements of Rule 433 with respect thereto, including timely filing with the Commission where required, legending and record keeping. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Underwriters and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

3.8 **Review of Financial Statements.** For a period of three (3) years after the date of this Agreement, the Company, at its expense, shall cause its regularly engaged independent registered public accounting firm to review (but not audit) the Company's financial statements for each of the three fiscal quarters immediately preceding the announcement of any quarterly financial information, provided that this section shall not restrict a sale, merger or similar transaction involving the Company. Notwithstanding the foregoing, the Company has not and is not undertaking, discussing or contemplating any such action, as described in Section 2.10.11 herein, that has not been brought to the attention of the Representative.

3.9 **Listing.** The Company shall use its commercially reasonable best efforts to maintain the listing of the shares of Common Stock (including the Public Securities) on the Exchange for at least three years from the date of this Agreement, provided that this section shall not restrict a sale, merger or similar transaction involving the Company. Notwithstanding the foregoing, the Company has not and is not undertaking, discussing or contemplating any such action, as described in Section 2.10.11 herein, that has not been brought to the attention of the Representative.

3.10 **Financial Public Relations Firm.** The Company has engaged a financial public relations firm reasonably acceptable to the Representative and shall retain such firm or another firm reasonably acceptable to the Representative for a period of not less than two (2) years after the Effective Date. The Representative acknowledges that the Company's current financial public relations firm is acceptable to the Representative.

3.11 **Reports to the Representative.**

3.11.1. **Periodic Reports, etc.** For a period of three (3) years after the date of this Agreement, the Company shall furnish or make available to the Representative copies of such financial statements and other periodic and special reports as the Company from time to time furnishes generally to holders of any class of its securities and also promptly furnish to the Representative: (i) a copy of each periodic report the Company shall be required to file with the Commission under the Exchange Act and the Exchange Act Regulations; (ii) a copy of every press release and every news item and article with respect to the Company or its affairs which was released by the Company; (iii) a copy of each Form 8-K prepared and filed by the Company; (iv) five copies of each registration statement filed by the Company under the Securities Act; and (v) such additional documents and information with respect to the Company and the affairs of any future subsidiaries of the Company as the Representative may from time to time reasonably request; provided the Representative shall sign, if requested by the Company, a Regulation FD compliant confidentiality agreement which is reasonably acceptable to the Representative and Representative Counsel in connection with the Representative's receipt of such information. Documents filed with the Commission pursuant to its EDGAR system shall be deemed to have been delivered to the Representative pursuant to this Section 3.11.1.

3.11.2. **Transfer Agent; Transfer Sheets.** For a period of three (3) years after the date of this Agreement, the Company shall retain a transfer agent and registrar acceptable to the Representative (the "**Transfer Agent**") and shall furnish to the Representative at the Company's sole cost and expense such transfer sheets of the Company's securities as the Representative may reasonably request, including the daily and monthly consolidated transfer sheets of the Transfer Agent and DTC, provided that this section shall not restrict a sale, merger or similar transaction involving the Company. Notwithstanding the foregoing, the Company has not and is not undertaking, discussing or contemplating any such action, as described in Section 2.10.11 herein, that has not been brought to the attention of the Representative. Continental Stock Transfer & Trust Company is acceptable to the Representative to act as Transfer Agent for the shares of Common Stock.

3.11.3. **Trading Reports.** During such time as the Public Securities are listed on the Exchange, the Company shall provide to the Representative, at the Company's expense, such reports published by Exchange relating to price trading of the Public Securities, as the Representative shall reasonably request.

3.12 **Payment of Expenses.** The Company agrees to pay on the Closing Date and the Option Closing Date, all expenses incident to the performance of the obligations of the Company under this Agreement, including but not limited to (a) all filing fees and communication expenses relating to the registration of the Public Securities to be sold in this Offering with the Commission; (b) all Public Filing System filing fees associated with the review of the Offering by FINRA; (c) all fees and expenses relating to the listing of such Public Securities on the Exchange and on such other stock exchanges as the Company and Representative together determine; (d) all fees, expenses and disbursements relating to the registration or qualification of the Public Securities offered under the "blue sky" securities laws of such states and other jurisdictions as the Representative may reasonably designate (including, without limitation, all filing and registration fees, and the reasonable fees of "blue sky" counsel); (e) all fees, expenses and disbursements relating to the registration, qualification or exemption of the Public Securities under the securities laws of such foreign jurisdictions as the Representative may reasonably designate; (f) the costs of all mailing and printing of the underwriting documents (including, without limitation, the Underwriting Agreement, any Blue Sky Surveys and, if appropriate, any Agreement Among Underwriters, Selected Dealers' Agreement, Underwriters' Questionnaire and Power of Attorney), registration statements, Prospectuses and all amendments, supplements and exhibits thereto and as many preliminary and final Prospectuses as the Representative may reasonably deem necessary; (g) the costs and expenses of the Company's public relations firm; (h) the costs of preparing, printing and delivering certificates representing the Public Securities to be offered in this offering; (i) fees and expenses of the transfer agent for the securities; (j) stock transfer and/or stamp taxes, if any, payable upon the transfer of securities from the Company to the Representative; (k) the fees and expenses of the Company's accountant; (l) the fees and expenses of the Company's legal counsel and other agents and representatives; and (m) up to \$135,000 of the out of pocket expenses incurred by the Underwriters including up to \$100,000 for legal fees of counsel to the Underwriter, and including up to \$35,000 for IPREO software related expenses, background check expenses, tombstones and marketing related expenses, including road show expenses if they are incurred. Notwithstanding the foregoing, any advance received by the Underwriters will be reimbursed to the Company to the extent not actually incurred in compliance with FINRA Rule 5110(f)(2)(C). In the event that this Agreement shall not be carried out for any reason whatsoever, except in the case of a default by the Underwriters, pursuant to Section 6.2 below, within the time specified herein or any extensions thereof pursuant to the terms herein, the Company shall be obligated to pay to the Underwriters their actual and accountable out-of-pocket expenses related to the transactions contemplated herein then due and payable (including the fees and disbursements of Representative Counsel) up to \$135,000 and upon demand the Company shall pay the full amount of such actual and accountable out-of-pocket expenses to the Underwriters; *provided, however*, that such expense cap in no way limits or impairs the indemnification and contribution provisions of this Agreement. The Representative may deduct from the net proceeds of the Offering payable to the Company on the Closing Date, or the Option Closing Date, if any, the expenses set forth herein to be paid by the Company to the Underwriters.

3.13 **Application of Net Proceeds.** The Company shall apply the net proceeds from the Offering received by it in a manner consistent with the application thereof described under the caption "Use of Proceeds" in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

3.14 **Delivery of Earnings Statements to Security Holders.** The Company shall make generally available to its security holders as soon as practicable, but not later than the first day of the fifteenth (15<sup>th</sup>) full calendar month following the date of this Agreement, an earnings statement (which need not be certified by independent registered public accounting firm unless required by the Securities Act or the Securities Act Regulations, but which shall satisfy the provisions of Rule 158(a) under Section 11(a) of the Securities Act) covering a period of at least twelve (12) consecutive months beginning after the date of this Agreement.

3.15 **Stabilization.** Neither the Company nor, to its knowledge, any of its employees, directors or shareholders (without the consent of the Representative) has taken or shall take, directly or indirectly, any action designed to or that has constituted or that might reasonably be expected to cause or result in, under Regulation M of the Exchange Act, or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Public Securities.

3.16 **Internal Controls.** The Company shall maintain a system of internal accounting controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary in order to permit preparation of financial statements in accordance with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

3.17 **Accountants.** As of the date of this Agreement, the Company shall continue to retain a nationally recognized independent registered public accounting firm for a period of at least three (3) years after the date of this Agreement. The Representative acknowledges that the Auditor is acceptable to the Representative.

3.18 **FINRA.** The Company shall advise the Representative (who shall make an appropriate filing with FINRA) if it is or becomes aware that Company or any of its affiliates (within the meaning of FINRA's Conduct Rule 5121(f)(1)) directly or indirectly controls, is controlled by, or is under common control with, or is an associated person (within the meaning of Article I, Section 1(ee) of the By-laws of FINRA) of, any member firm of FINRA.

3.19 **No Fiduciary Duties.** The Company acknowledges and agrees that the Underwriters' responsibility to the Company is solely contractual in nature and that none of the Underwriters or their affiliates or any selling agent shall be deemed to be acting in a fiduciary capacity, or otherwise owes any fiduciary duty to the Company or any of its affiliates in connection with the Offering and the other transactions contemplated by this Agreement.

### 3.20 Company Lock-Up Agreements

3.20.1. **Restriction on Sales of Capital Stock** The Company, on behalf of itself and any successor entity, agrees that, without the prior written consent of the Representative, it will not, for a period of 90 days after the date of this Agreement (the “**Lock-Up 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, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company; (ii) file or cause to be filed any registration statement with the Commission relating to the offering of any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company; or (iii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of capital stock of the Company, whether any such transaction described in clause (i), (ii) or (iii) above is to be settled by delivery of shares of capital stock of the Company or such other securities, in cash or otherwise.

The restrictions contained in this Section 3.20.1 shall not apply to (i) the shares of Common Stock, Firm Warrants or Option Warrants to be sold hereunder, (ii) the issuance by the Company of shares of Common Stock upon the exercise of a stock option or warrant or the conversion of a security outstanding on the date hereof, of which the Representative has been advised in writing, provided that such stock option, warrant or securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities or to extend the term of such securities ; (iii) the issuance by the Company of stock options or shares of capital stock of the Company under any equity compensation plan of the Company; or (iv) the transfer, issuance, sale or disposition of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock pursuant to an investment in which a single strategic investor (and not an organization primarily engaged in the business of capital raising) acquires over twenty five percent (25%) of the fully diluted capitalization of the Company of the date thereof, provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith within 90 days following the date of this Agreement, (v) the issuance of any securities of the Company in connection with a merger, joint venture, licensing arrangement or any other similar non-capital raising transaction provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith within 90 days following the date of this Agreement, or (vi) the issuance of securities of the Company to consultants in the Company’s ordinary course of business provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith within 90 days following the date of this Agreement.

3.21 **Release of D&O Lock-Up Period**. If the Representative, in its sole discretion, agrees to release or waive the restrictions set forth in the Lock-Up Agreements for an officer or director of the Company and provide the Company with notice of the impending release or waiver at least three (3) Business Days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit B hereto through a major news service at least two (2) Business Days before the effective date of the release or waiver.

3.22 **Blue Sky Qualifications**. The Company shall use its commercially reasonable best efforts, in cooperation with the Underwriters, if necessary, to qualify the Public Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representative may designate and to maintain such qualifications in effect so long as required to complete the distribution of the Public Securities; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

3.23 **Reporting Requirements**. The Company, during the period when a prospectus relating to the Public Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the Securities Act, will file all documents required to be filed with the Commission pursuant to the Exchange Act within the time periods required by the Exchange Act and Exchange Act Regulations. Additionally, the Company shall report the use of proceeds from the issuance of the Public Securities as may be required under Rule 463 under the Securities Act Regulations.



3.24 **Smaller Reporting Company.** As of the time of the initial filing of the Registration Statement and as of the date hereof, the Company was a “smaller reporting company,” as defined in Rule 12b-2 of the Exchange Act Regulations.

3.25 **Press Releases.** Prior to the Closing Date and any Option Closing Date, the Company shall not issue any press release or other communication directly or indirectly or hold any press conference with respect to the Company, its condition, financial or otherwise, or earnings, business affairs or business prospects (except for routine oral marketing communications in the ordinary course of business and consistent with the past practices of the Company and of which the Representative is notified), without the prior written consent of the Representative, which consent shall not be unreasonably withheld, unless in the judgment of the Company and its counsel, and after notification to the Representative, such press release or communication is required by law.

3.26 **Sarbanes-Oxley.** The Company shall at all times comply with all applicable provisions of the Sarbanes-Oxley Act in effect from time to time.

3.27 **IRS Forms.** The Company shall deliver to each Underwriter (or its agent), prior to or at the Closing Date, a properly completed and executed Internal Revenue Service (“IRS”) Form W-9 or an IRS Form W-8, as appropriate, together with all required attachments to such form.

3.28 **Additional Compensation to the Representative.** As additional compensation, the Company will issue the Representative or its designees, at the Closing Date and any Option Closing Date, shares (the “**Representative’s Compensation Shares**”) of Common Stock equal to two percent (2%) of the aggregate number of Shares sold in the Offering. Except as provided in FINRA Rule 5110(g)(2), the Representative’s Compensation Shares have been deemed underwriting compensation by FINRA and shall not be sold, transferred, assigned, pledged, or hypothecated, or the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of such shares by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this Offering, pursuant to FINRA Rule 5110(g)(1). The Company has also granted the Representative the right to receive the compensation described above in connection with any future public or private offering or other capital raising transaction by the Company to investors (excluding the Pre-Existing Relationship Investors) that were “brought over the wall” by the Representative with the Company’s consent during the Representative’s sixty (60)-day engagement period that commenced on July 22, 2019, as long as such offering or capital raising transaction is consummated within the five (5)-month period following the introduction to such investors subsequent to July 22, 2019 (“Tail Compensation”). Notwithstanding the foregoing, no Tail Compensation shall be due if the Offering fails to close due to the Representative’s gross negligence or willful misconduct or a material breach of the Representative’s obligations under this Underwriting Agreement.

4. **Conditions of Underwriters’ Obligations.** The obligations of the Underwriters to purchase and pay for the Public Securities, as provided herein, shall be subject to (i) the continuing accuracy of the representations and warranties of the Company as of the date hereof and as of the Closing Date and the Option Closing Date, if any; (ii) the accuracy of the statements of officers of the Company made pursuant to the provisions hereof; (iii) the performance by the Company of its obligations hereunder; and (iv) the following conditions:

4.1 **Regulatory Matters.**

4.1.1. **Effectiveness of Registration Statement; Required Filings.** The Registration Statement has been declared effective by the Commission under the Securities Act and, at the Closing Date and any Option Closing Date, no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the Securities Act, no order preventing or suspending the use of any Preliminary Prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company’s knowledge, contemplated by the Commission. The Company has complied with each request (if any) from the Commission for additional information. The Prospectus containing the Rule 430A Information shall have been filed with the Commission in the manner and within the time frame required by Rule 424(b) (without reliance on Rule 424(b)(8)) or a post-effective amendment providing such information shall have been filed with, and declared effective by, the Commission in accordance with the requirements of Rule 430A under the Securities Act Regulations. The Registration Statement meets the requirements set forth in Rule 415(a)(1)(iii) under the Securities Act with respect to the Warrant Shares and the Conversion Shares and complies with said Rule.

4.1.2. **FINRA Clearance.** On or before the date of this Agreement, the Representative shall have received clearance from FINRA as to the amount of compensation allowable or payable to the Underwriters as described in the Registration Statement.

4.1.3. **Exchange Stock Market Clearance.** On the Closing Date, the Company's shares of Common Stock, including the Firm Shares, the Warrant Shares, the Conversion Shares and the Option Securities, shall have been approved for listing on the Exchange, subject only to official notice of issuance.

4.2 **Company Counsel Matters.**

4.2.1. **Closing Date Opinion of Counsel.** On the Closing Date, the Representative shall have received the favorable opinion and negative assurance letter of Andrew Abramowitz, PLLC, with offices located at 565 5th Ave #9, New York, New York 10017, counsel to the Company, dated the Closing Date and addressed to the Representative, in form and substance reasonably satisfactory to the Representative.

4.2.2. **Opinion of Special Intellectual Property Counsel for the Company.** On the Closing Date, the Representative shall have received the opinion of Fish & Richardson, special intellectual property counsel for the Company, dated the Closing Date, addressed to the Representative, in form and substance reasonably satisfactory to the Representative.

4.2.3. **Option Closing Date Opinion of Counsel.** On the Option Closing Date, if any, the Representative shall have received the favorable opinion of such counsel listed in Section 4.2.1, dated the Option Closing Date, addressed to the Representative and in form and substance reasonably satisfactory to the Representative, confirming as of the Option Closing Date, the statements made by such counsel in its respective opinion delivered on the Closing Date.

4.2.4. **Reliance.** In rendering such opinions, such counsel may rely: (i) as to matters involving the application of laws other than the laws of the United States and jurisdictions in which they are admitted, to the extent such counsel deems proper and to the extent specified in such opinion, if at all, upon an opinion or opinions (in form and substance reasonably satisfactory to the Representative) of other counsel reasonably acceptable to the Representative, familiar with the applicable laws; and (ii) as to matters of fact, to the extent they deem proper, on certificates or other written statements of officers of the Company and officers of departments of various jurisdictions having custody of documents respecting the corporate existence or good standing of the Company, provided that copies of any such statements or certificates shall be delivered to Representative Counsel if requested.

4.2.5. **Certificate of Designation.** On the Closing Date, the Representative shall have received evidence of the filing and acceptance of the Certificate of Designation from the Secretary of State of the State of Delaware.

#### 4.3 **Comfort Letters.**

4.3.1. **Cold Comfort Letter.** At the time this Agreement is executed, you shall have received a cold comfort letter containing statements and information of the type customarily included in accountants' comfort letters with respect to the financial statements and certain financial information contained or incorporated or deemed incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, addressed to the Representative and in form and substance satisfactory in all respects to you and to the Auditor, dated as of the date of this Agreement.

4.3.2. **Bring-down Comfort Letter.** On the Closing Date and the Option Closing Date, you shall have received from the Auditor a letter, dated as of the Closing Date or the Option Closing Date, as applicable, to the effect that the Auditor reaffirms the statements made in the letter furnished pursuant to Section 4.3.1, except that the specified date referred to shall be a date not more than three (3) business days prior to the Closing Date or the Option Closing Date, as applicable.

#### 4.4 **Officers' Certificates.**

4.4.1. **Officers' Certificate.** The Company shall have furnished to the Representative a certificate, dated the Closing Date and any Option Closing Date (if such date is other than the Closing Date), of its Chief Executive Officer, and its Chief Financial Officer stating that (i) such officers have carefully examined the Registration Statement, the Pricing Disclosure Package, any Issuer Free Writing Prospectus and the Prospectus and, in their opinion, the Registration Statement and each amendment thereto, as of the Applicable Time and as of the Closing Date (or any Option Closing Date if such date is other than the Closing Date) did not include any untrue statement of a material fact and did not omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and the Pricing Disclosure Package, as of the Applicable Time and as of the Closing Date (or any Option Closing Date if such date is other than the Closing Date), any Issuer Free Writing Prospectus as of its date and as of the Closing Date (or any Option Closing Date if such date is other than the Closing Date), the Prospectus and each amendment or supplement thereto, as of the respective date thereof and as of the Closing Date (or any Option Closing Date if such date is other than the Closing Date), did not include any untrue statement of a material fact and did not omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances in which they were made, not misleading, (ii) since the Applicable Time, no event has occurred which should have been set forth in a supplement or amendment to the Registration Statement, the Pricing Disclosure Package or the Prospectus, (iii) to the best of their knowledge after reasonable investigation, as of the Closing Date (or any Option Closing Date if such date is other than the Closing Date) (except for those representations and warranties qualified which refer to facts existing at a specific date, which shall be true and correct as of such date), the representations and warranties of the Company in this Agreement are true and correct and the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date (or any Option Closing Date if such date is other than the Closing Date), and (iv) there has not been, subsequent to the date of the most recent audited financial statements included or incorporated by reference in the Pricing Disclosure Package, any Material Adverse Effect in the financial position or results of operations of the Company, or any change or development that, singularly or in the aggregate, would involve a Material Adverse Effect or a prospective Material Adverse Effect, in or affecting the condition (financial or otherwise), results of operations, business, assets or prospects of the Company, except as set forth in the Prospectus.

4.4.2. **Chief Financial Officer's Certificate.** At the Closing Date, and the Option Closing Date, if any, the Representative shall have received a certificate executed by the Chief Financial Officer of the Company, dated the Closing Date or the Option Date, as the case may be, respectively, in form and substance satisfactory to the Representative.

4.4.3. **Secretary's Certificate.** At the Closing Date, and the Option Closing Date, if any, the Representative shall have received a certificate of the Company signed by the Secretary of the Company, dated the Closing Date or the Option Date, as the case may be, respectively, certifying: (i) that each of the Charter and Bylaws is true and complete, has not been modified and is in full force and effect; (ii) that the resolutions of the Company's Board of Directors relating to the Offering are in full force and effect and have not been modified; (iii) as to the accuracy and completeness of all correspondence between the Company or its counsel and the Commission; and (iv) as to the incumbency of the officers of the Company. The documents referred to in such certificate shall be attached to such certificate.

4.5 **No Material Changes.** Prior to and on the Closing Date and each Option Closing Date, if any: (i) there shall have been no Material Adverse Effect or development involving a prospective Material Adverse Effect in the condition or prospects or the business activities, financial or otherwise, of the Company from the latest dates as of which such condition is set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus; (ii) no action, suit or proceeding, at law or in equity, shall have been pending or to the Company's knowledge threatened against the Company or any Insider before or by any court or federal or state commission, board or other administrative agency wherein an unfavorable decision, ruling or finding may materially adversely affect the business, operations, prospects or financial condition or income of the Company, except as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus; (iii) no stop order shall have been issued under the Securities Act and no proceedings therefor shall have been initiated or to the Company's knowledge threatened by the Commission; and (iv) the Registration Statement, the Pricing Disclosure Package and the Prospectus and any amendments or supplements thereto shall contain all material statements which are required to be stated therein in accordance with the Securities Act and the Securities Act Regulations and shall conform in all material respects to the requirements of the Securities Act and the Securities Act Regulations, and neither the Registration Statement, the Pricing Disclosure Package nor the Prospectus nor any amendment or supplement thereto shall contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

4.6 **No Material Misstatement or Omission.** The Underwriters shall not have discovered and disclosed to the Company on or prior to the Closing Date and each Option Closing Date, if any, that the Registration Statement or any amendment or supplement thereto contains an untrue statement of a fact which, in the opinion of counsel for the Underwriters, is material or omits to state any fact which, in the opinion of such counsel, is material and is required to be stated therein or is necessary to make the statements therein not misleading, or that the Registration Statement, the Pricing Disclosure Package or the Prospectus or any amendment or supplement thereto contains an untrue statement of fact which, in the opinion of such counsel, is material or omits to state any fact which, in the opinion of such counsel, is material and is necessary in order to make the statements, in the light of the circumstances under which they were made, not misleading.

4.7 **Delivery of Agreements.**

4.7.1. **Lock-Up Agreements.** On or before the date of this Agreement, the Company shall have delivered to the Representative executed copies of the Lock-Up Agreements from each of the persons listed in Schedule 3 hereto.

4.8 **Good Standings.** The Representative shall have received at the time this Agreement is executed, and at the Closing Date and at each Option Closing Date (if any), satisfactory evidence of the good standing of the Company and its subsidiaries in their respective jurisdictions of organization and their good standing as foreign entities in such other jurisdictions as the Representative may request, in each case in writing or any standard form of telecommunication from the appropriate governmental authorities of such jurisdictions.

4.9 **Additional Documents.** At the Closing Date and at each Option Closing Date (if any) Representative Counsel shall have been furnished with such documents and opinions as they may reasonably require for the purpose of enabling Representative Counsel to deliver an opinion to the Underwriters, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Public Securities as herein contemplated shall be satisfactory in form and substance to the Representative and Representative Counsel.

5. **Indemnification.**

5.1 **Indemnification of the Underwriters.**

5.1.1. **General.** Subject to the conditions set forth below, the Company agrees to indemnify and hold harmless each Underwriter, its affiliates and each of its and their respective directors, officers, members, employees, representatives and agents and each person, if any, who controls any such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act (collectively the “Underwriter Indemnified Parties,” and each an “Underwriter Indemnified Party”), against any and all loss, liability, claim, damage and expense whatsoever (including but not limited to any and all legal or other expenses reasonably incurred in investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever, whether arising out of any action between any of the Underwriter Indemnified Parties and the Company or between any of the Underwriter Indemnified Parties and any third party, or otherwise) to which they or any of them may become subject under the Securities Act, the Exchange Act or any other statute or at common law or otherwise or under the laws of foreign countries, arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in (i) the Registration Statement, the Pricing Disclosure Package, the Preliminary Prospectus, or the Prospectus (as from time to time each may be amended and supplemented); (ii) any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the Offering, including any “road show” or investor presentations made to investors by the Company (whether in person or electronically); or (iii) any application or other document or written communication (in this Section 5, collectively called “application”) executed by the Company or based upon written information furnished by the Company in any jurisdiction in order to qualify the Public Securities under the securities laws thereof or filed with the Commission, any state securities commission or agency, the Exchange or any other national securities exchange; or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, unless such statement or omission was made in reliance upon, and in conformity with, the Underwriters’ Information. With respect to any untrue statement or omission or alleged untrue statement or omission made in the Pricing Disclosure Package, the indemnity agreement contained in this Section 5.1.1 shall not inure to the benefit of any Underwriter Indemnified Party to the extent that any loss, liability, claim, damage or expense of such Underwriter Indemnified Party results from the fact that a copy of the Prospectus was not given or sent to the person asserting any such loss, liability, claim or damage at or prior to the written confirmation of sale of the Public Securities to such person as required by the Securities Act and the Securities Act Regulations, and if the untrue statement or omission has been corrected in the Prospectus, unless such failure to deliver the Prospectus was a result of non-compliance by the Company with its obligations under Section 3.3 hereof.

5.1.2. **Procedure.** If any action is brought against an Underwriter Indemnified Party in respect of which indemnity may be sought against the Company pursuant to Section 5.1.1, such Underwriter Indemnified Party shall promptly notify the Company in writing of the institution of such action and the Company shall assume the defense of such action, including the employment and fees of counsel (subject to the reasonable approval of such Underwriter Indemnified Party) and payment of actual expenses. Such Underwriter Indemnified Party shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such Underwriter Indemnified Party unless (i) the employment of such counsel at the expense of the Company shall have been authorized in writing by the Company in connection with the defense of such action, or (ii) the Company shall not have employed counsel to have charge of the defense of such action, or (iii) such indemnified party or parties shall have reasonably concluded that there may be defenses available to it or them which are different from or additional to those available to the Company (in which case the Company shall not have the right to direct the defense of such action on behalf of the indemnified party or parties), in any of which events the reasonable fees and expenses of not more than one additional firm of attorneys selected by the Underwriter Indemnified Party (in addition to local counsel) shall be borne by the Company. Notwithstanding anything to the contrary contained herein, if any Underwriter Indemnified Party shall assume the defense of such action as provided above, the Company shall have the right to approve the terms of any settlement of such action, which approval shall not be unreasonably withheld.

5.2 **Indemnification of the Company.** Each Underwriter, severally and not jointly, agrees to indemnify and hold harmless the Company, its directors, its officers who signed the Registration Statement and persons who control the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act against any and all loss, liability, claim, damage and expense described in the foregoing indemnity from the Company to the several Underwriters, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions made in the Registration Statement, any Preliminary Prospectus, the Pricing Disclosure Package or Prospectus or any amendment or supplement thereto or in any application, in reliance upon, and in strict conformity with, the Underwriters' Information. In case any action shall be brought against the Company or any other person so indemnified based on any Preliminary Prospectus, the Registration Statement, the Pricing Disclosure Package or Prospectus or any amendment or supplement thereto or any application, and in respect of which indemnity may be sought against any Underwriter, such Underwriter shall have the rights and duties given to the Company, and the Company and each other person so indemnified shall have the rights and duties given to the several Underwriters by the provisions of Section 5.1.2. The Company agrees promptly to notify the Representative of the commencement of any litigation or proceedings against the Company or any of its officers, directors or any person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, in connection with the issuance and sale of the Public Securities or in connection with the Registration Statement, the Pricing Disclosure Package, or the Prospectus or any Issuer Free Writing Prospectus.

5.3 **Contribution.**

5.3.1 **Contribution Rights.** If the indemnification provided for in this Section 5 shall for any reason be unavailable to or insufficient to hold harmless an indemnified party under Section 5.1 or 5.2 in respect of any loss, claim, damage or liability, or any action in respect thereof, referred to therein, then each indemnifying party shall, in lieu of indemnifying such indemnified party, contribute to the amount paid or payable by such indemnified party as a result of such loss, claim, damage or liability, or action in respect thereof, (i) in such proportion as shall be appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other, from the Offering of the Public Securities, or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and the Underwriters, on the other, with respect to the statements or omissions that resulted in such loss, claim, damage or liability, or action in respect thereof, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriters, on the other, with respect to such Offering shall be deemed to be in the same proportion as the total net proceeds from the Offering of the Public Securities purchased under this Agreement (before deducting expenses) received by the Company, as set forth in the table on the cover page of the Prospectus, on the one hand, and the total underwriting discounts and commissions received by the Underwriters with respect to the shares of Common Stock purchased under this Agreement, as set forth in the table on the cover page of the Prospectus, on the other hand. The relative fault shall be determined by reference to whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 5.3.1 were to be determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, damage or liability, or action in respect thereof, referred to above in this Section 5.3.1 shall be deemed to include, for purposes of this Section 5.3.1, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 5.3.1 in no event shall an Underwriter be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by such Underwriter with respect to the Offering of the Public Securities exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. 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.

5.3.2. **Contribution Procedure.** Within fifteen (15) days after receipt by any party to this Agreement (or its representative) of notice of the commencement of any action, suit or proceeding, such party will, if a claim for contribution in respect thereof is to be made against another party (“contributing party”), notify the contributing party of the commencement thereof, but the failure to so notify the contributing party will not relieve it from any liability which it may have to any other party other than for contribution hereunder. In case any such action, suit or proceeding is brought against any party, and such party notifies a contributing party or its representative of the commencement thereof within the aforesaid 15 days, the contributing party will be entitled to participate therein with the notifying party and any other contributing party similarly notified. Any such contributing party shall not be liable to any party seeking contribution on account of any settlement of any claim, action or proceeding affected by such party seeking contribution on account of any settlement of any claim, action or proceeding affected by such party seeking contribution without the written consent of such contributing party. The contribution provisions contained in this Section 5.3.2 are intended to supersede, to the extent permitted by law, any right to contribution under the Securities Act, the Exchange Act or otherwise available. Each Underwriter’s obligations to contribute pursuant to this Section 5.3 are several and not joint.

6. **Default by an Underwriter.**

6.1 **Default Not Exceeding 10% of Firm Securities or Option Securities** If any Underwriter or Underwriters shall default in its or their obligations to purchase the Firm Securities or the Option Securities, and if the number of the Firm Securities or the Option Securities with respect to which such default relates does not exceed in the aggregate 10% of the number of Firm Securities or the Option Securities that all Underwriters have agreed to purchase hereunder, then such Firm Securities or the Option Securities to which the default relates shall be purchased by the non-defaulting Underwriters in proportion to their respective commitments hereunder.

6.2 **Default Exceeding 10% of Firm Securities or the Option Securities** In the event that the default addressed in Section 6.1 relates to more than 10% of the Firm Securities or the Option Securities, you may in your discretion arrange for yourself or for another party or parties to purchase such Firm Securities or the Option Securities to which such default relates on the terms contained herein. If, within one (1) Business Day after such default relating to more than 10% of the Firm Securities or the Option Securities, you do not arrange for the purchase of such Firm Securities or the Option Securities, then the Company shall be entitled to a further period of one (1) Business Day within which to procure another party or parties satisfactory to you to purchase said Firm Securities or the Option Securities on such terms. In the event that neither you nor the Company arrange for the purchase of the Firm Securities or the Option Securities to which a default relates as provided in this Section 6, this Agreement will automatically be terminated by you or the Company without liability on the part of the Company (except as provided in Sections 3.11 and 5 hereof) or the several Underwriters (except as provided in Section 5 hereof); provided, *however*, that if such default occurs with respect to the Option Securities, this Agreement will not terminate as to the Firm Securities; and *provided, further*, that nothing herein shall relieve a defaulting Underwriter of its liability, if any, to the other Underwriters and to the Company for damages occasioned by its default hereunder.

6.3 **Postponement of Closing Date.** In the event that the Firm Securities or Option Securities to which the default relates are to be purchased by the non-defaulting Underwriters, or are to be purchased by another party or parties as aforesaid, you or the Company shall have the right to postpone the Closing Date or Option Closing Date for a reasonable period, but not in any event exceeding five (5) Business Days, in order to effect whatever changes may thereby be made necessary in the Registration Statement, the Pricing Disclosure Package or the Prospectus or in any other documents and arrangements, and the Company agrees to file promptly any amendment to the Registration Statement, the Pricing Disclosure Package or the Prospectus that in the opinion of counsel for the Underwriter may thereby be made necessary. The term "Underwriter" as used in this Agreement shall include any party substituted under this Section 6 with like effect as if it had originally been a party to this Agreement with respect to such shares of Common Stock.

## 7. **Additional Covenants**

7.1 **Board Composition and Board Designations.** The Company shall ensure that: (i) the qualifications of the persons serving as members of the Board of Directors and the overall composition of the Board comply with the Sarbanes-Oxley Act, with the Exchange Act and with the listing rules of the Exchange or any other national securities exchange, as the case may be, in the event the Company seeks to have its Public Securities listed on another exchange or quoted on an automated quotation system, and (ii) if applicable, at least one member of the Audit Committee of the Board of Directors qualifies as an "audit committee financial expert," under Regulation S-K and the listing rules of the Exchange.

7.2 **Prohibition on Press Releases and Public Announcements.** The Company shall not issue press releases or engage in any other publicity, without the Representative's prior written consent, for a period ending at 5:00 p.m., Eastern time, on the first (1st) Business Day following the 40<sup>th</sup> day after the Closing Date, other than normal and customary releases issued in the ordinary course of the Company's business.

7.3 **Right of First Refusal.** During the period ending twelve (12) months after the Closing Date (the "ROFR Period"), the Company grants the Representative the right of first refusal to act as a lead managing underwriter or book runner, or as a lead placement agent, for any and all future equity, equity-linked or debt (excluding commercial bank debt) offerings during the ROFR Period (the "ROFR"), of the Company, or any successor to or any subsidiary of the Company (each a "Subject Transaction"), on competitive compensation terms; provided, however that during the first six (6) months of the ROFR Period, the Company may engage a second entity to act as a secondary underwriter or placement agent whose service in such position shall be junior to the Representative and whose engagement in such position must be on commercially reasonable terms acceptable to the Representative, as evidenced in writing. The Company shall notify the Representative of its intention to pursue a Subject Transaction, including the material terms thereof, by providing written notice thereof in accordance with Section 9.1. If the Representative fails to exercise its Right of First Refusal with respect to any Subject Transaction within five (5) Business Days after the mailing of such written notice, provided that the Representative confirms in writing to the Company its receipt of such written notice, then the Representative shall have no further claim or right with respect to the Subject Transaction. Notwithstanding the foregoing, at any time after the date that is six (6) months following the Closing Date, the Company may elect to exclude any Subject Transaction from the ROFR hereunder by written notice to the Underwriter delivered in accordance with Section 9.1 (an "Excluded Transaction"), provided that the Company shall be required to pay 3% of the gross proceeds to the Company from any Excluded Transaction (an "Excluded Transaction Payment") completed during the remainder of the ROFR Period. Any Excluded Transaction Payments shall be due within 30 days of the closing of the Excluded Transaction.

## 8. **Effective Date of this Agreement and Termination Thereof**

8.1 **Effective Date.** This Agreement shall become effective when both the Company and the Representative have executed the same and delivered counterparts of such signatures to the other party.

8.2 **Termination.** The Representative shall have the right to terminate this Agreement at any time prior to any Closing Date, (i) if any domestic or international event or act or occurrence has materially disrupted, or in your opinion will in the immediate future materially disrupt, general securities markets in the United States; or (ii) if trading on the New York Stock Exchange or the Nasdaq Stock Market LLC shall have been suspended or materially limited, or minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required by FINRA or by order of the Commission or any other government authority having jurisdiction; or (iii) if the United States shall have become involved in a new war or an increase in major hostilities; or (iv) if a banking moratorium has been declared by a New York State or federal authority; or (v) if a moratorium on foreign exchange trading has been declared which materially adversely impacts the United States securities markets; or (vi) if the Company shall have sustained a material loss by fire, flood, accident, hurricane, earthquake, theft, sabotage or other calamity or malicious act which, whether or not such loss shall have been insured, will, in your opinion, make it inadvisable to proceed with the delivery of the Firm Securities or Option Securities; or (vii) if the Company is in material breach of any of its representations, warranties or covenants hereunder; or (viii) if the Representative shall have become aware after the date hereof of such a Material Adverse Effect in the conditions or prospects of the Company, or such adverse material change in general market conditions as in the Representative's judgment would make it impracticable to proceed with the offering, sale and/or delivery of the Public Securities or to enforce contracts made by the Underwriters for the sale of the Public Securities.



8.3 **Expenses.** Notwithstanding anything to the contrary in this Agreement, except in the case of a default by the Underwriters, pursuant to Section 6.2 above, in the event that this Agreement is terminated prior to the Closing Date for any reason whatsoever, within the time specified herein or any extensions thereof pursuant to the terms herein, the Company shall be obligated to pay to the Underwriters their actual and accountable out-of-pocket documented expenses related to the transactions contemplated herein then due and payable (including the out-of-pocket and documented fees and disbursements of Representative Counsel) up to \$135,000, and upon demand the Company shall pay the full amount thereof up to the cap to the Representative on behalf of the Underwriters; provided, however, that such expense cap in no way limits or impairs the indemnification and contribution provisions of this Agreement.

8.4 **Survival of Indemnification.** Notwithstanding any contrary provision contained in this Agreement, any election hereunder or any termination of this Agreement, and whether or not this Agreement is otherwise carried out, the provisions of Section 5 shall remain in full force and effect and shall not be in any way affected by, such election or termination or failure to carry out the terms of this Agreement or any part hereof.

8.5 **Representations, Warranties, Agreements to Survive.** All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or its Affiliates or selling agents, any person controlling any Underwriter, its officers or directors or any person controlling the Company or (ii) delivery of and payment for the Public Securities.

9. **Miscellaneous.**

9.1 **Notices.** All communications hereunder, except as herein otherwise specifically provided, shall be in writing and shall be mailed (registered or certified mail, return receipt requested), personally delivered or sent by facsimile transmission and confirmed and shall be deemed given when so delivered or faxed and confirmed or if mailed, two (2) days after such mailing.

If to the Representative:

A.G.P./Alliance Global Partners  
590 Madison Avenue, 36<sup>th</sup> Floor  
New York, New York 10022  
Attn: Mr. David Bocchi, Managing Director of Investment Banking  
Fax No.: (212) 813-1047

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

Zysman, Aharoni, Gayer and Sullivan & Worcester LLP  
1633 Broadway  
New York, New York 10019  
Attention: Oded Har-Even, Esq.  
Fax No.: (212) 660-3000

If to the Company:

iBio, Inc.  
600 Madison Avenue, Suite 1601  
New York, NY 10022-1737  
Attn: Robert B. Kay, Chief Executive Officer  
Fax No.: (302) 356-1173

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

Andrew Abramowitz, PLLC  
565 5th Ave #9  
New York, New York 10017  
Attention: Andrew Abramowitz, Esq.  
Fax No.: (212) 972-8883

9.2 **Headings.** The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of this Agreement.

9.3 **Amendment.** This Agreement may only be amended by a written instrument executed by each of the parties hereto.

9 . 4 **Entire Agreement.** This Agreement (together with the other agreements and documents being delivered pursuant to or in connection with this Agreement) constitutes the entire agreement of the parties hereto with respect to the subject matter hereof and thereof, and supersedes all prior agreements and understandings of the parties, oral and written, with respect to the subject matter hereof.

9 . 5 **Binding Effect.** This Agreement shall inure solely to the benefit of and shall be binding upon the Representative, the Underwriters, the Company and the controlling persons, directors and officers referred to in Section 5 hereof, and their respective successors, legal representatives, heirs and assigns, and no other person shall have or be construed to have any legal or equitable right, remedy or claim under or in respect of or by virtue of this Agreement or any provisions herein contained. The term "successors and assigns" shall not include a purchaser, in its capacity as such, of securities from any of the Underwriters.

9 . 6 **Governing Law; Consent to Jurisdiction; Trial by Jury.** This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of New York, without giving effect to conflict of laws principles thereof. The Company hereby agrees that any action, proceeding or claim against it arising out of, or relating in any way to this Agreement shall be brought and enforced in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. The Company hereby waives any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum. Any such process or summons to be served upon the Company may be served by transmitting a copy thereof by registered or certified mail, return receipt requested, postage prepaid, addressed to it at the address set forth in Section 9.1 hereof. Such mailing shall be deemed personal service and shall be legal and binding upon the Company in any action, proceeding or claim. The Company agrees that the prevailing party(ies) in any such action shall be entitled to recover from the other party(ies) all of its reasonable attorneys' fees and expenses relating to such action or proceeding and/or incurred in connection with the preparation therefor. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters 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.

9 . 7 **Execution in Counterparts.** This Agreement may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement, and shall become effective when one or more counterparts has been signed by each of the parties hereto and delivered to each of the other parties hereto. Delivery of a signed counterpart of this Agreement by facsimile or email/pdf transmission shall constitute valid and sufficient delivery thereof.

9.8 **Waiver, etc.** The failure of any of the parties hereto to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provision, nor to in any way effect the validity of this Agreement or any provision hereof or the right of any of the parties hereto to thereafter enforce each and every provision of this Agreement. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Agreement shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

[Signature Page Follows]

If the foregoing correctly sets forth the understanding between the Underwriters and the Company, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between us.

Very truly yours,

IBIO, INC.

By: /s/ Robert B. Kay

Name: Robert B. Kay

Title: Chief Executive Officer

Confirmed as of the date first written above mentioned, on behalf of itself and as Representative of the several Underwriters named on Schedule 1 attached hereto:

A.G.P./ALLIANCE GLOBAL PARTNERS

By: /s/ Thomas J. Higgins

Name: Thomas J. Higgins

Title: Managing Director, Investment Banking

[Signature Page]

IBIO, inc. – Underwriting Agreement

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**SCHEDULE 1**

<b>Underwriter</b>	<b>Total Number of Firm Shares to be Purchased</b>	<b>Total Number of Preferred Shares to be Purchased</b>	<b>Total Number of Series A Warrants to be Purchased</b>	<b>Total Number of Series B Warrants to be Purchased</b>	<b>Number of Option Shares to be Purchased if the Over-Allotment Option is Fully Exercised by the Representative</b>	<b>Number of Series A Warrants to be Purchased if the Over-Allotment Option is Fully Exercised by the Representative</b>	<b>Number of Series B Warrants to be Purchased if the Over-Allotment Option is Fully Exercised by the Representative</b>
<b>A.G.P./Alliance Global Partners</b>	2,450,000	4,510	25,000,000	25,000,000	3,750,000	3,750,000	3,750,000
<b>TOTAL</b>	2,450,000	4,510	25,000,000	25,000,000	3,750,000	3,750,000	3,750,000

**SCHEDULE 2-A**

**Pricing Information**

Number of Firm Shares: 2,450,000

Number of Preferred Shares: 4,510

Number of Series A Warrants: 25,000,000

Number of Series B Warrants: 25,000,000

Number of Option Shares: 3,750,000

Number of Series A Warrants Comprising Option Warrants: 3,750,000

Number of Series B Warrants Comprising Option Warrants: 3,750,000

Public Offering Price per Firm Share: \$0.198

Public Offering Price per Preferred Share: \$999.998

Public Offering Price per Firm Warrant: \$0.001

Firm Warrant Exercise Price: \$0.22

Underwriting Discount per Firm Share sold to Pre-Existing Relationship Investors: \$0.0069

Underwriting Discount per Firm Share sold to Investors that are not Pre-Existing Relationship Investors: \$0.0139

Underwriting Discount per Preferred Share sold to Pre-Existing Relationship Investors: \$34.9999

Underwriting Discount per Preferred Share sold to Investors that are not Pre-Existing Relationship Investors: \$69.9999

Underwriting Discount per Firm Warrant sold to Pre-Existing Relationship Investors: \$0.00003

Underwriting Discount per Firm Warrant sold to Investors that are not Pre-Existing Relationship Investors: \$0.00007

Proceeds to Company per Firm Share (before expenses): \$0.1841

Proceeds to Company per Preferred Share (before expenses): \$929.9981

Proceeds to Company per Firm Warrant (before expenses): \$0.0009

**SCHEDULE 2-B**

**Issuer General Use Free Writing Prospectus**

Issuer General Use Free Writing Prospectus filed with the Commission on September 17, 2019 and as amended and filed on October 10, 2019

Sch. 2-2

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**SCHEDULE 3**

**List of Lock-Up Parties**

**Robert B. Kay**

**Robert L. Erwin**

**Terence E. Ryan, Ph.D.**

**James P. Mullaney**

**General James T. Hill**

**Glenn Chang**

**John D. McKey, Jr.**

**Phillip K. Russell, M.D.**

**Seymour Flug**

**Tom Isett**



**EXHIBIT A**

**Lock-Up Agreement**

October 25, 2019

A.G.P./Alliance Global Partners  
590 Madison Avenue, 36<sup>th</sup> Floor  
New York, New York 10022

As Underwriter named on Schedule 1 to the  
Underwriting Agreement referenced below

**Re: Public Offering of iBio, Inc.**

Ladies and Gentlemen:

The undersigned understands that you (the "*Underwriter*") propose to enter into an Underwriting Agreement (the "*Underwriting Agreement*") providing for the purchase by the Underwriter of shares (the "*Stock*") of common stock, par value \$0.001 per share (the "*Common Stock*"), warrants (the "*Warrants*") to purchase shares of Common Stock and Series C Convertible Preferred Stock, par value \$0.001 per share (the "*Series C Preferred Stock*") of iBio, Inc., a Delaware corporation (the "*Company*"), and that the Underwriter proposes to reoffer the Stock, the Warrants and the Series C Preferred Stock to the public (the "*Offering*").

In consideration of the execution of the Underwriting Agreement by the Underwriter, and for other good and valuable consideration, the undersigned hereby irrevocably agrees that, without the prior written consent of the Underwriter, the undersigned will not, directly or indirectly, (a) offer for sale, sell, pledge, or otherwise transfer or dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the transfer or disposition by any person at any time in the future of) any shares of Common Stock (including, without limitation, shares of Common Stock that may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission (the "*Commission*") and shares of Common Stock that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for Common Stock; (b) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of shares of Common Stock, whether any such transaction described in clause (a) or (b) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise; (c) except as provided for below, make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of Common Stock or securities convertible into or exercisable or exchangeable for Common Stock or any other securities of the Company; or (d) publicly disclose the intention to do any of the foregoing for a period commencing on the date hereof and ending ninety (90) days after the date of the effective date of the Registration Statement relating to the Offering (such 90-day period, the "*Lock-Up Period*").

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The foregoing paragraph shall not apply to (a) transactions relating to shares of Common Stock or other securities acquired in the open market after the completion of the Offering, *provided that* no filing under Section 16(a) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), shall be required or shall be voluntarily made in connection with such transfers; (b) bona fide gifts of shares of any class of the Company’s capital stock or any security convertible into Common Stock, in each case that are made exclusively between and among the undersigned or members of the undersigned’s family, or affiliates of the undersigned, including its partners (if a partnership) or members (if a limited liability company); (c) any transfer of shares of Common Stock or any security convertible into Common Stock by will or intestate succession upon the death of the undersigned; (d) transfer of shares of Common Stock or any security convertible into Common Stock to an immediate family member (for purposes of this Lock-Up Letter Agreement, “**immediate family**” shall mean any relationship by blood, marriage or adoption, not more remote than first cousin) or any trust, limited partnership, limited liability company or other entity for the direct or indirect benefit of the undersigned or any immediate family member of the undersigned; *provided that*, in the case of clauses (b), (c) and (d) above, it shall be a condition to any such transfer that (i) the transferee/donee agrees to be bound by the terms of this Lock-Up Letter Agreement (including, without limitation, the restrictions set forth in the preceding sentence) to the same extent as if the transferee/donee were a party hereto; (ii) each party (donor, donee, transferor or transferee) shall not be required by law (including without limitation the disclosure requirements of the Securities Act of 1933, as amended (the “**Securities Act**”), and the Exchange Act) to make, and shall agree to not voluntarily make, any filing or public announcement of the transfer or disposition prior to the expiration of the 90-day period referred to above; and (iii) the undersigned notifies the Underwriter at least two (2) business days prior to the proposed transfer or disposition; (e) the transfer of shares to the Company to satisfy withholding obligations for any equity award granted pursuant to the terms of the Company’s stock option/incentive plans, such as upon exercise, vesting, lapse of substantial risk of forfeiture, or other similar taxable event, in each case on a “cashless” or “net exercise” basis (which, for the avoidance of doubt shall not include “cashless” exercise programs involving a broker or other third party), *provided that* as a condition of any transfer pursuant to this clause (e), that if the undersigned is required to file a report under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock during the Lock-Up Period, the undersigned shall include a statement in such report, and if applicable an appropriate disposition transaction code, to the effect that such transfer is being made as a share delivery or forfeiture in connection with a net value exercise, or as a forfeiture or sale of shares solely to cover required tax withholding, as the case may be; (f) transfers of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock pursuant to a bona fide third party tender offer made to all holders of the Common Stock, merger, consolidation or other similar transaction involving a change of control (as defined below) of the Company, including voting in favor of any such transaction or taking any other action in connection with such transaction, *provided that* in the event that such merger, tender offer or other transaction is not completed, the Common Stock and any security convertible into or exercisable or exchangeable for Common Stock shall remain subject to the restrictions set forth herein; (g) the exercise of warrants or the exercise of stock options granted pursuant to the Company’s stock option/incentive plans or otherwise outstanding on the date hereof; *provided*, that the restrictions shall apply to shares of Common Stock issued upon such exercise or conversion; (h) the establishment of any contract, instruction or plan that satisfies all of the requirements of Rule 10b5-1 (a “**Rule 10b5-1 Plan**”) under the Exchange Act; *provided, however*, that no sales of Common Stock or securities convertible into, or exchangeable or exercisable for, Common Stock, shall be made pursuant to a Rule 10b5-1 Plan prior to the expiration of the Lock-Up Period; *provided further*, that the Company is not required to report the establishment of such Rule 10b5-1 Plan in any public report or filing with the Commission under the Exchange Act during the lock-up period and does not otherwise voluntarily effect any such public filing or report regarding such Rule 10b5-1 Plan; and (i) any demands or requests for, exercise any right with respect to, or take any action in preparation of, the registration by the Company under the Securities Act of the undersigned’s shares of Common Stock, *provided that* no transfer of the undersigned’s shares of Common Stock registered pursuant to the exercise of any such right and no registration statement shall be filed under the Securities Act with respect to any of the undersigned’s shares of Common Stock during the Lock-Up Period. For purposes of clause (f) above, “**change of control**” shall mean the consummation of any bona fide third party tender offer, merger, purchase, consolidation or other similar transaction the result of which is that any “**person**” (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of a majority of total voting power of the voting stock of the Company.

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The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the undersigned's securities subject to this Lock-Up Letter Agreement except in compliance with this Lock-Up Letter Agreement.

It is understood that, if the Company notifies the Underwriter that it does not intend to proceed with the Offering, if the Underwriting Agreement does not become effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Stock, the undersigned will be released from its obligations under this Lock-Up Letter Agreement.

The undersigned understands that the Company and the Underwriter will proceed with the Offering in reliance on this Lock-Up Letter Agreement.

Whether or not the Offering actually occurs depends on a number of factors, including market conditions. Any Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriter.

This Lock-Up Letter Agreement shall automatically terminate upon the earliest to occur, if any, of (a) the termination of the Underwriting Agreement before the sale of any Stock, Warrants or Series C Preferred Stock to the Underwriter; or (b) November 8, 2019, in the event that the Underwriting Agreement has not been executed by that date.

This Lock-Up Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof. Delivery of a signed copy of this Lock-Up Agreement by facsimile or e-mail/.pdf transmission shall be effective as the delivery of the original hereof.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Letter Agreement and that, upon request, the undersigned will execute any additional documents necessary in connection with the enforcement hereof. Any obligations of the undersigned shall be binding upon the heirs, personal representative, successors and assigns of the undersigned.

[Signature page follows]

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Very truly yours,

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name of Signatory, in the case of entities – Please Print)

\_\_\_\_\_  
(Title of Signatory, in the case of entities – Please Print)

Address: \_\_\_\_\_  
\_\_\_\_\_

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**EXHIBIT B**

**Form of Press Release**

**iBio, Inc.**

**[Date]**

iBio, Inc. (the “Company”) announced today that A.G.P./Alliance Global Partners, acting as representative for the underwriters in the Company’s recent public offering of \_\_\_\_\_ shares of Common Stock, is [waiving] [releasing] a lock-up restriction with respect to \_\_\_\_\_ shares of Common Stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on \_\_\_\_\_, 20\_\_\_\_, and the shares may be sold on or after such date.

**This press release is not an offer or sale of the securities in the United States or in any other jurisdiction where such offer or sale is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the Securities Act of 1933, as amended.**

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State of Delaware  
Secretary of State  
Division of Corporations  
Delivered 02:53 PM 10/28/2019  
FILED 02:53 PM 10/28/2019  
SR 2019768109 - File Number 4535152

**IBIO, INC.**

**CERTIFICATE OF DESIGNATION OF PREFERENCES,  
RIGHTS AND LIMITATIONS  
OF  
SERIES C CONVERTIBLE PREFERRED STOCK  
PURSUANT TO SECTION 151 OF THE  
DELAWARE GENERAL CORPORATION LAW**

The undersigned does hereby certify that:

1. He is the Chief Executive Officer of iBio, Inc., a Delaware corporation (the "**Corporation**").
2. The Corporation is authorized to issue up to 1,000,000 shares of preferred stock, \$0.001 par value per share, in one or more series.
3. Pursuant to authority expressly conferred upon the Board of Directors of the Corporation (the "**Board**") by the Corporation's Certificate of Incorporation, as amended (the "**Certificate of Incorporation**"), the Board on October 25, 2019 adopted the following resolutions creating a series of shares of preferred stock designated as the Series C Convertible Preferred Stock, none of which shares have been issued:

**RESOLVED**, that the Board hereby designates the Series C Convertible Preferred Stock and the number of shares constituting such series and hereby fixes the rights, powers, preferences, privileges and restrictions relating to such series as follows:

**TERMS OF SERIES C CONVERTIBLE PREFERRED STOCK**

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

"**Adjustment Right**" means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale in accordance with Section 7) of shares of Common Stock (other than rights of the type described in Section 3 and 7 hereof) that could result in a decrease in the net consideration received by the Corporation in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights)

"**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.

"**Alternate Consideration**" shall have the meaning set forth in Section 7(d).

"**Beneficial Ownership Limitation**" shall have the meaning set forth in Section 6(d).

"**Black Scholes Consideration Value**" means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining

term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

**"Bloomberg"** means Bloomberg L.P.

**"Business Day"** means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any other day on which the Federal Reserve Bank of New York is closed.

**"Buy-In"** shall have the meaning set forth in Section 6(c)(iv).

**"Certificate of Designations"** means this Certificate of Designations of Preferences, Rights and Limitations of the Series C Convertible Preferred Stock of the Corporation.

**"Closing Sale Price"** means, for any security as of any date, the last closing trade price for such security on the principal Trading Market, as reported by Bloomberg, or, if the principal Trading Market begins to operate on an extended hours basis and does not designate the closing trade price, then the last trade price of such security prior to 4:00 p.m., New York time, as reported by Bloomberg, or, if no last trade price is reported for such security by Bloomberg, the average of the ask prices of any market makers for such security as reported in the "pink sheets" 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 mutually determined by the Corporation and the Holders of a majority of the then outstanding shares of Preferred Stock. All such determinations shall be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during such period.

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

**"Common Stock"** means the Corporation'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.

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

**"Conversion Amount"** means the sum of the Stated Value at issue.

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

**"Conversion Price"** shall have the meaning set forth in Section 6(b).

**"Conversion Shares"** means, collectively, the shares of Common Stock issuable upon conversion of the shares of Preferred Stock in accordance with the terms hereof.

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

**"DTC"** shall have the meaning set forth in Section 6(e)(i).

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

**"Exempt Issuance"** means the issuance of (a) shares of Common Stock or options to employees, officers or directors of the Corporation pursuant to any stock or option plan duly adopted by a majority of the non-employee members of the Board of Directors of the Corporation or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to the Corporation, (b) securities upon the exercise or exchange of or conversion of any securities issued pursuant to the Underwriting Agreement and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of the Underwriting Agreement, provided that such securities have not been amended since the date of the Underwriting Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of any such securities or to extend the term of such securities, (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Corporation, provided that such securities are issued as "restricted securities" (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the ninety (90) day period following the Original Issue Date, and provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Corporation and shall provide to the Corporation additional benefits in addition to the investment of funds, but shall not include a transaction in which the Corporation is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

**"Fundamental Transaction"** shall have the meaning set forth in Section 7(d).

**"Holder"** shall have the meaning set forth in Section 2.

**"Liquidation"** shall have the meaning set forth in Section 5.

**"New York Courts"** shall have the meaning set forth in Section 8(d).

**"Notice of Conversion"** shall have the meaning set forth in Section 6(a).

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

**"Original Issue Date"** means the date of the first issuance of any shares of the Preferred Stock regardless of the number of transfers of any particular shares of Preferred Stock and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

**"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.

**"Preferred Stock"** shall have the meaning set forth in Section 2.

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

**"Share Delivery Date"** shall have the meaning set forth in Section 6(c).

**"Stated Value"** shall have the meaning set forth in Section 2.

**"Subsidiary"** means any subsidiary of the Corporation and shall, where applicable, also include any direct or indirect subsidiary of the Corporation formed or acquired after the date hereof.

**"Successor Entity"** shall have the meaning set forth in Section 7(d).

**"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; the New York Stock Exchange; the OTC Markets or the OTC Bulletin Board (or any successors to any of the foregoing).

**"Transfer Agent"** means Continental Stock Transfer and Trust Company, Inc., the current transfer agent of the Corporation, with a mailing address of 1 State Street, 30th Floor, New York, NY 10004 and a facsimile number of (212) 616-7617 and any successor transfer agent of the Corporation.

**"Underwriting Agreement"** means the underwriting agreement, dated as of October 25, 2019, among the Corporation and A.G.P./Alliance Global Partners as representative of the underwriters named therein, as amended, modified or supplemented from time to time in accordance with its terms.

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

Section 2. **Designation, Amount and Par Value.** The series of preferred stock shall be designated as the Series C Convertible Preferred Stock (the "**Preferred Stock**") and the number of authorized shares so designated shall be 4,510 shares of Preferred Stock (which amount shall not be amended without the written consent of the holders (each, a "**Holder**" and collectively, the "**Holders**") of a majority of the shares of Preferred Stock then outstanding. Each share of Preferred Stock shall have a par value of \$0.001 per share and a stated value equal to \$1,000 per share, subject to adjustment for stock splits, stock dividends, recapitalizations, reclassifications or other similar events occurring after the Original Issue Date (the "**Stated Value**").

Section 3. **Dividends.** Except for stock dividends or distributions for which adjustments are to be made pursuant to Section 7, the Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of Preferred Stock equal (on an as-if-converted-to-Common-Stock basis, without regard to conversion limitations herein) to and in the same form as dividends actually paid on shares of the Common Stock when, as and if such dividends are paid on shares of Common Stock. The Corporation shall not pay any dividends on the Common Stock unless the Corporation simultaneously complies with this provision. No other dividends shall be paid or accrued on shares of Preferred Stock.

Section 4. **Voting Rights; Ranking.** Except as otherwise provided herein or as otherwise required by law, the Preferred Stock shall have no voting rights. However, as long as any shares of Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Preferred Stock or otherwise alter or amend this Certificate of Designation, (b) amend its Certificate of Incorporation or other charter documents in any manner that adversely affects any rights of the Holders, (c) amend the number of authorized shares of Preferred Stock, (d) issue any shares of Preferred Stock other than pursuant to this Certificate of Designations or (e) enter into any agreement with respect to any of the foregoing. The Preferred Stock shall rank *pari passu* to the Common Stock, the Corporation's Series A Convertible Preferred Stock, par value \$0.001 per share ("**Series A Preferred Stock**") and the Corporation's Series B Convertible Preferred Stock, par value \$0.001 per share ("**Series B Preferred Stock**").

Section 5. Liquidation. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a "Liquidation"), the Holders shall be entitled to receive out of the assets, whether capital or surplus, of the Corporation the same amount that a holder of Common Stock would receive if the Preferred Stock were fully converted (disregarding for such purposes any conversion limitations hereunder) into Common Stock at the Conversion Price, which amounts shall be paid *pari passu* with all holders of Common Stock, the Series A Preferred Stock and the Series B Preferred Stock. The Corporation shall mail written notice of any such Liquidation, not less than 45 days prior to the payment date stated therein, to each Holder.

Section 6. Conversion.

a) Conversions at Option of Holder. Each share of Preferred Stock shall be convertible, at any time and from time to time from and after the Original Issue Date at the option of the Holder thereof, into that number of validly issued, fully paid and non-assessable shares of Common Stock (subject to the limitations set forth in Section 6(d)) determined by dividing the Stated Value of such share of Preferred Stock by the Conversion Price. Holders shall effect conversions by delivering to the Corporation (via facsimile, email or otherwise as set forth herein) the form of conversion notice attached hereto as Annex A (a "Notice of Conversion"). Each Notice of Conversion shall specify the number of shares of Preferred Stock to be converted, the number of shares of Preferred Stock owned prior to the conversion at issue, the number of shares of Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers by facsimile, email or otherwise as set forth herein such Notice of Conversion to the Corporation (such date, the "Conversion Date"). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. 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. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue. Shares of Preferred Stock converted into Common Stock or redeemed in accordance with the terms hereof shall be canceled and shall not be reissued.

b) Conversion Price. The conversion price for the Preferred Stock shall equal \$0.20, subject to adjustment herein (the "Conversion Price").

c) Mechanics of Conversion.

i. Delivery of Conversion Shares Upon Conversion. Not later than the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined below) after each Conversion Date (the "Share Delivery Date"), the Corporation shall deliver, or cause to be delivered, to the converting Holder (A) the number of Conversion Shares being acquired upon the conversion of the Preferred Stock, which Conversion Shares shall be free of restrictive legends and trading restrictions and (B) a bank check in the amount of accrued and unpaid dividends, if any. In accordance with the delivery instructions set forth in the Notice of Conversion, as applicable, the Corporation shall use its best efforts to deliver the Conversion Shares required to be delivered by the Corporation under this Section 6 electronically through the Depository Trust Company ("DTC") or another established clearing corporation performing similar functions. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Corporation's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Conversion. Notwithstanding the foregoing, with respect to any Notice(s) of Conversion delivered by 12:00 p.m. (New York City time) on the Original Issue Date, which may be delivered at any time after the time of execution of the Underwriting Agreement, the Corporation agrees to deliver the Conversion Shares subject to such notice(s) by 4:00 p.m. (New York City time) on the Original Issue Date and the Original Issue Date shall be the Share Delivery Date for purposes hereunder.

ii. Failure to Deliver Conversion Shares. If, in the case of any Notice of Conversion, such Conversion Shares are not delivered to or as directed by the applicable Holder by the Share Delivery Date,

the Holder shall be entitled to elect by written notice to the Corporation at any time on or before its receipt of such Conversion Shares, to rescind such conversion, in which event the Corporation shall promptly return to the Holder any original Preferred Stock certificate delivered to the Corporation and the Holder shall promptly return to the Corporation the Conversion Shares issued to such Holder pursuant to the rescinded Notice of Conversion.

iii. Partial Liquidated Damages. If the Corporation fails to deliver to a Holder such Conversion Shares pursuant to Section 6(c)(i) by the Share Delivery Date applicable to such conversion, the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Stated Value of Preferred Stock being converted, \$10 per Trading Day for each Trading Day after the Share Delivery Date until such Conversion Shares are delivered or the Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

iv. Compensation for Buy-In on Failure to Timely Deliver Conversion Shares Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable Conversion Shares by the Share Delivery Date pursuant to Section 6(c)(i), 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, if any, by which (x) such Holder's total purchase price (including any brokerage commissions) for the 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 Preferred Stock equal to the number of shares of Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) 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(c)(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 Preferred Stock with respect to which the actual sale price of the Conversion Shares (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 indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver Conversion Shares upon conversion of the shares of Preferred Stock as required pursuant to the terms hereof.

v. Reservation of Shares Issuable Upon Conversion. The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Preferred Stock as herein provided, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other holders of the Preferred Stock), not less than such aggregate number of shares of the Common Stock as shall be issuable (assuming a Conversion Price equal to the Floor Price) upon the conversion of the then outstanding shares of 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 nonassessable.

vi. Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of the Preferred Stock. As to any fraction of a share which the Holder would otherwise

be entitled to purchase upon such conversion, the Corporation shall at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Conversion Price or round up to the next whole share. Notwithstanding anything to the contrary contained herein, but consistent with the provisions of this subsection with respect to fractional Conversion Shares, nothing shall prevent any Holder from converting fractional shares of Preferred Stock.

vii. **Transfer Taxes and Expenses.** The issuance of Conversion Shares on conversion of the 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 Conversion Shares, 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 Conversion Shares upon conversion in a name other than that of the Holders of such shares of Preferred Stock and the Corporation shall not be required to issue or deliver such Conversion Shares 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. The Corporation shall pay all Transfer Agent fees required for same-day processing of any Notice of Conversion and all fees to the DTC (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Conversion Shares.

d) **Beneficial Ownership Limitation.** Notwithstanding anything to the contrary herein, the Corporation shall not effect any conversion of the Preferred Stock, and a Holder shall not have the right to convert any portion of the Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or any of such Holder's Affiliates (such Persons, "**Attribution Parties**")) would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Stated Value of Preferred Stock beneficially owned by such Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein (including, without limitation, the Preferred Stock) beneficially owned by such Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 6(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this Section 6(d) applies, the determination of whether the Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and of how many shares of Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and how many shares of Preferred Stock are convertible, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such conversion will not violate the restrictions set forth in this paragraph and the Corporation shall have no obligation to verify or confirm the accuracy of such representation. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 6(d), 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: (i) the Corporation's most recent periodic or annual report filed with the Commission, as the case may be, (ii) a more recent public announcement by the Corporation or (iii) a more recent written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request (which may be via email) of a Holder, the Corporation shall within one (1) Trading Day confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Preferred Stock, by such Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "**Beneficial Ownership Limitation**" shall be 4.99% (or, upon election by a Holder prior to the issuance of any shares of Preferred Stock, 9.99%) of the number of

shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of Preferred Stock held by the applicable Holder. A Holder, upon notice to the Corporation, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 6(d) applicable to its Preferred Stock provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon conversion of this Preferred Stock held by the Holder and the provisions of this Section 6(d) shall continue to apply. Any such increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Corporation and shall only apply to such Holder and no other Holder. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6(d) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of Preferred Stock.

**Section 7. Certain Adjustments.**

a) **Stock Dividends and Stock Splits.** If the Corporation, at any time while this Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of, or payment of a dividend on, this Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the Conversion Price 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 before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to 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, combination or re-classification.

b) **Subsequent Rights Offerings.** In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of such Holder's Preferred Stock (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) **Pro Rata Distributions.** During such time as this Preferred Stock is outstanding, if the Corporation declares or makes any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Preferred Stock, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Preferred Stock (without regard to any

limitations on conversion hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) **Fundamental Transaction.** If, at any time while this Preferred Stock is outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person, (ii) the Corporation, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "**Fundamental Transaction**"), then, upon any subsequent conversion of this Preferred Stock, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock), the number of shares of Common Stock of the successor or acquiring corporation or of the Corporation, if it is the surviving corporation, and any additional consideration (the "**Alternate Consideration**") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Preferred Stock is convertible immediately prior to such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock). For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one (1) share of Common Stock in such Fundamental Transaction, and the Corporation shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Preferred Stock following such Fundamental Transaction. The amount of any consideration to be received by a Holder in connection with a Fundamental Transaction shall be payable in the same type or form of consideration (and in the same proportion) that is being offered and paid to the holders of Common Stock of the Corporation in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the 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 Corporation shall cause any successor entity in a Fundamental Transaction in which the Corporation is not the survivor (the "**Successor Entity**") to assume in writing all of the obligations of the Corporation under this Certificate of Designation in accordance with the provisions of this Section 7(d) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the holder of this Preferred Stock, deliver to the Holder in exchange for this Preferred Stock a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Preferred Stock, which is

convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of this Preferred Stock (without regard to any limitations on the conversion of this Preferred Stock) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of this Preferred Stock immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designation referring to the "Corporation" shall refer instead to the Successor Entity), and may exercise every right and power of the Corporation and shall assume all of the obligations of the Corporation under this Certificate of Designation with the same effect as if such Successor Entity had been named as the Corporation herein. For the avoidance of doubt, if, at any time while this Preferred Stock is outstanding, a Fundamental Transaction occurs, pursuant to the terms of this Section 7(d), the Holder shall not be entitled to receive more than one of (i) the consideration receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Preferred Stock is convertible immediately prior to such Fundamental Transaction or (ii) the assumption by the Successor Entity of all of the obligations of the Corporation under this Certificate of Designation and the option to receive a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Certificate of Designation.

f) **Subsequent Equity Sales.** If, while at any time that shares of the Preferred Stock are outstanding, the Corporation or any Subsidiary, as applicable sells or grants any option to purchase or sells or grants any right to reprice, or otherwise disposes of or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or Common Stock Equivalents entitling any Person to acquire shares of Common Stock at an effective price per share that is lower than the then Conversion Price (such lower price, the "**Base Conversion Price**" and such issuances, collectively, a "**Dilutive Issuance**") (if the holder of the Common Stock or Common Stock Equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, make-whole provisions that result in the payment or issuance of cash, shares of Common Stock or any other consideration, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for the lowest price possible pursuant to such issuance and regardless of the current market price at the time of such issuance), then the Conversion Price shall be reduced to equal the higher of the (i) Base Conversion Price or (ii) \$0.05 (the "**Floor Price**"), which Floor Price shall be subject to adjustment in accordance with Section 7(a). For the avoidance of doubt, if more than one security is issued in a transaction that is being analyzed to determine whether a Dilutive Issuance has occurred and/or to determine a Base Conversion Price, each security so issued shall be analyzed separately with respect to such determinations such that the lowest effective price per share with respect to each such security shall be used. For example, if the existing conversion price hereunder is \$1.00 and the Corporation issues units for \$0.90 per unit, with each unit comprised of one (1) share of Common Stock and one (1) warrant exercisable for one (1) share of Common Stock, which new warrant has an exercise price of \$1.50 per share, the Base Conversion Price will be \$0.90 minus the Black Scholes Consideration Value. Notwithstanding the foregoing, no adjustment will be made under this Section 7(f) in respect of an Exempt Issuance. The Corporation shall notify the Holders in writing, no later than the Trading Day following the issuance of any Common Stock or Common Stock Equivalents subject to this Section 7(f), indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the "**Dilutive Issuance Notice**"). For purposes of clarification, whether or not the Corporation provides a Dilutive Issuance Notice pursuant to this Section 7(f), upon the occurrence of any Dilutive Issuance, the Holders are entitled to receive a number of Conversion Shares based upon the Base Conversion Price on or after the date of such Dilutive Issuance, regardless of whether a Holder accurately refers to the Base Conversion Price in the Notice of Conversion. For all purposes of the foregoing (including, without limitation, determining the Base Conversion Price under this Section 7(f)), the following shall be applicable:

i. **Issuance of Options.** If the Corporation in any manner grants or sells any Options and the lowest price per share for which one share of Common Stock is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any

Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof is less than the Conversion Price then in effect, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Corporation at the time of the granting or sale of such Option for such price per share. For purposes of this Section 7(f)(i), the "lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof" shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Corporation with respect to any one share of Common Stock upon the granting or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such Option for which one share of Common Stock is issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Option (or any other Person) upon the granting or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Option (or any other Person). Except as contemplated below, no further adjustment of the Conversion Price shall be made upon the actual issuance of such shares of Common Stock or of such Convertible Securities upon the exercise of such Options or otherwise pursuant to the terms of or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

ii. Issuance of Convertible Securities. If the Corporation in any manner issues or sells any Convertible Securities and the lowest price per share for which one share of Common Stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof is less than the Conversion Price then in effect, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Corporation at the time of the issuance or sale of such Convertible Securities for such price per share. For the purposes of this Section 7(f)(ii), the "lowest price per share for which one share of Common Stock is issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof" shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Corporation with respect to one share of Common Stock upon the issuance or sale of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security or otherwise pursuant to the terms thereof and (y) the lowest conversion price set forth in such Convertible Security for which one share of Common Stock is issuable upon conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Convertible Security (or any other Person) upon the issuance or sale of such Convertible Security plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Convertible Security (or any other Person). Except as contemplated below, no further adjustment of the Conversion Price shall be made upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities or otherwise pursuant to the terms thereof, and if any such issuance or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of the Conversion Price has been or is to be made pursuant to other provisions of this Section 7(f), except as contemplated below, no further adjustment of the Conversion Price shall be made by reason of such issuance or sale.

iii. Change in Option Price or Rate of Conversion. If the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares of Common Stock increases or decreases at any time (other than proportional changes in conversion or exercise



prices, as applicable, in connection with an event referred to in Section 7(a)), the Conversion Price in effect at the time of such increase or decrease shall be adjusted to the Conversion Price which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 7(f)(iii), if the terms of any Option or Convertible Security that was outstanding as of the Initial Exercise Date are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 7(f) shall be made if such adjustment would result in an increase of the Conversion Price then in effect.

iv. **Calculation of Consideration Received.** If any Option and/or Convertible Security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Corporation (as determined by the Holder, the "Primary Security," and such Option and/or Convertible Security and/or Adjustment Right, the "Secondary Securities"), together comprising one integrated transaction, (or one or more transactions if such issuances or sales or deemed issuances or sales of securities of the Corporation either (A) have at least one investor or purchaser in common, (B) are consummated in reasonable proximity to each other and/or (C) are consummated under the same plan of financing) the aggregate consideration per share of Common Stock with respect to such Primary Security shall be deemed to be equal to the difference of (x) the lowest price per share for which one share of Common Stock was issued (or was deemed to be issued pursuant to Section 2(b)(i) or 2(b)(ii) above, as applicable) in such integrated transaction solely with respect to such Primary Security, minus (y) with respect to such Secondary Securities, the sum of (I) the Black Scholes Consideration Value of each such Option, if any, (II) the fair market value (as determined by the Holder in good faith) or the Black Scholes Consideration Value, as applicable, of such Adjustment Right, if any, and (III) the fair market value (as determined by the Holder) of such Convertible Security, if any, in each case, as determined on a per share basis in accordance with this Section 2(b)(iv). If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor (for the purpose of determining the consideration paid for such Common Stock, Option or Convertible Security, but not for the purpose of the calculation of the Black Scholes Consideration Value) will be deemed to be the net amount of consideration received by the Corporation therefor. If any shares of Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Corporation (for the purpose of determining the consideration paid for such Common Stock, Option or Convertible Security, but not for the purpose of the calculation of the Black Scholes Consideration Value) will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Corporation for such securities will be the arithmetic average of the VWAPs of such security for each of the five (5) Trading Days immediately preceding the date of receipt. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Corporation is the surviving entity, the amount of consideration therefor (for the purpose of determining the consideration paid for such Common Stock, Option or Convertible Security, but not for the purpose of the calculation of the Black Scholes Consideration Value) will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities (as the case may be). The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Corporation and the Holder. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the "Valuation Event"), the fair value of such consideration will be determined within five (5) Trading Days after the tenth (10th) day following such Valuation Event by an independent, reputable appraiser jointly selected by the Corporation and the Holder. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Corporation.

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

g) 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.

h) Notice to the Holders.

i. Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

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

i) Holder's Right of Alternative Exercise Price Following Issuance of Certain Options or Convertible Securities. In addition to and not in limitation of the other provisions of this Section 7, if the Corporation in any

manner issues or sells or enters into any agreement to issue or sell, any Common Stock, Options or Convertible Securities (any such securities, "Variable Price Securities") after the Original Issue Date that are issuable pursuant to such agreement or convertible into or exchangeable or exercisable for shares of Common Stock at a price which varies or may vary with the market price of the shares of Common Stock, including by way of one or more reset(s) to a fixed price, but exclusive of such formulations reflecting customary anti-dilution provisions (such as share splits, share combinations, share dividends and similar transactions) (each of the formulations for such variable price being herein referred to as, the "Variable Price"), the Corporation shall provide written notice thereof via facsimile and overnight courier to the Holder on the date of such agreement and the issuance of such Convertible Securities or Options. From and after the date the Corporation enters into such agreement or issues any such Variable Price Securities, the Holder shall have the right, but not the obligation, in its sole discretion to substitute the Variable Price for the Conversion Price upon any conversion of Preferred Stock by designating in the Conversion Notice delivered upon any conversion of Preferred Stock that solely for purposes of such conversion the Holder is relying on the Variable Price rather than the Conversion Price then in effect. The Holder's election to rely on a Variable Price for a particular conversion of Preferred Stock shall not obligate the Holder to rely on a Variable Price for any future conversion of Preferred Stock.

Section 8. Miscellaneous.

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, by facsimile, by email or sent by a nationally recognized overnight courier service, addressed to the Corporation at:

iBio, Inc.  
600 Madison Avenue, Suite 1601  
New York, NY 10022-1737  
Facsimile: 302-356-1173  
Email: robertbkay@bioinc.com  
Attention: Robert B. Kay

with a copy (for informational purposes only) to:

Andrew Abramowitz, PLLC  
565 Fifth Avenue, 9th Floor  
New York, NY 10017  
Facsimile: (212) 972-8883  
Email: aa@aalegalnyc.com  
Attention: Andrew Abramowitz, Esq.

or such other facsimile number, email address or address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section 8. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile, by email or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number, email address or address of such Holder appearing on the books of the Corporation, or if no such facsimile number, email address or address appears on the books of the Corporation, 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 facsimile or email at the facsimile number or email address set forth in this Section 8 prior to 12:00 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or email at the facsimile number or email address set forth in this Section 8 on a day that is not a Trading Day or later than 12:00 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the Person to whom such notice is required to be given. Notwithstanding any other provision of this Certificate of Designation, where this Certificate of Designation provides for notice of any event to a Holder, if the Preferred Stock is held in global form by DTC (or any successor depository), such notice may be delivered via DTC (or such successor depository) pursuant to the procedures of DTC (or such successor depository).

b) Absolute Obligation. Except as expressly provided herein, no provision of this Certificate of Designation shall alter or impair the obligation of the Corporation, which is absolute and unconditional, to pay liquidated damages and accrued dividends, as applicable, on the shares of Preferred Stock at the time, place, and rate, and in the coin or currency, herein prescribed.

c) Lost or Mutilated Preferred Stock Certificate. If a Holder's 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 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 hereof reasonably satisfactory to the Corporation.

d) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Certificate of Designation shall be governed by and construed and enforced in accordance with the internal laws of the State of Delaware, without regard to the principles of conflict of laws thereof. Each of the Corporation and each Holder agrees that all legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by this Certificate of Designation (whether brought against the Corporation, a Holder or any of their respective Affiliates, directors, officers, shareholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the "New York Courts"). Each of the Corporation and each Holder 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 suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such New York Courts, or such New York Courts are improper or inconvenient venue for such proceeding. Each of the Corporation and each Holder hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such Person at the address in effect for notices to it under this Certificate of Designation and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by applicable law. Each of the Corporation and each Holder 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 Certificate of Designation or the transactions contemplated hereby. If the Corporation or any Holder shall commence an action or proceeding to enforce any provisions of this Certificate of Designation, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

e) 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 Person (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 on any other occasion. Any waiver by the Corporation or a Holder must be in writing.

f) 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. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

g) 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.

h) 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.

i) Status of Converted or Redeemed Preferred Stock. If any shares of Preferred Stock shall be converted, redeemed or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series C Convertible Preferred Stock.

j) Transfer of Preferred Stock. A Holder may transfer some or all of its shares of Preferred Stock without the consent of the Corporation in accordance with applicable securities laws. If a Holder transfers any shares of Preferred Stock, as applicable, the Holder shall surrender the certificate representing the Preferred Stock to the Corporation, whereupon the Corporation will forthwith issue and deliver upon the order of such Holder a new certificate representing the Preferred Stock, registered as such Holder may request, representing the outstanding number of shares of Preferred Stock being transferred by such Holder and, if less than the entire outstanding shares of Preferred Stock is being transferred, a new certificate to such Holder representing the outstanding shares of Preferred Stock not being transferred.

k) Remedies, Characterizations, Other Obligations, Breaches and Injunctive Relief. The remedies provided in this Certificate of Designations shall be cumulative and in addition to all other remedies available under this Certificate of Designations, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the Holder's right to pursue actual and consequential damages for any failure by the Corporation to comply with the terms of this Certificate of Designations. The Corporation covenants to the Holder that there shall be no characterization concerning this instrument other than as expressly provided herein. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by the Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Corporation (or the performance thereof). The Corporation acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Corporation therefore agrees that, in the event of any such breach or threatened breach, the Holder shall be entitled, in addition to all other available remedies, to an injunction restraining any such breach or any such threatened breach, without the necessity of showing economic loss and without any bond or other security being required. The Corporation shall provide all information and documentation to the Holder that is requested by the Holder to enable the Holder to confirm the Corporation's compliance with the terms and conditions of this Certificate of Designations.

l) Amendments. This Certificate of Designations or any provision hereof may be amended by obtaining the affirmative vote at a meeting duly called for such purpose, or written consent without a meeting in accordance with the DGCL, of the Holders of a majority of the then outstanding shares of Preferred Stock, voting separately as a single class, and with such other stockholder approval, if any, as may then be required pursuant to the DGCL and the Certificate of Incorporation.

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**RESOLVED, FURTHER,** that the Chairman, the president or any vice-president, and the secretary or any assistant secretary, of the Corporation be and they hereby are authorized and directed to prepare and file this Certificate of Designation of Preferences, Rights and Limitations of Series C Convertible Preferred Stock in accordance with the foregoing resolution and the provisions of Delaware law.

*[Signature page follows]*

IN WITNESS WHEREOF, the Corporation has caused the undersigned to execute this Certificate of Designation of Preferences, Rights and Limitations of Series C Convertible Preferred Stock on this 28th day of October 2019.

**IBIO, INC.**

By: /s/ Robert B. Kay  
Name: Robert B. Kay  
Title: Chief Executive Officer

NOTICE OF CONVERSION

Reference is made to the Certificate of Designations of Preferences, Rights and Limitations (the "Certificate of Designations") of the Series C Convertible Preferred Stock, par value \$0.001 per share (the "Preferred Stock"), of iBio, Inc., a Delaware corporation (the "Corporation"). In accordance with and pursuant to the Certificate of Designations, the undersigned hereby elects to convert the number of shares of Preferred Stock indicated below into shares of common stock, par value \$0.001 per share, of the Corporation (the "Common Stock"), as of the date specified below. If shares of Common Stock 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. No fee will be charged to the Holder for any conversion, except for any such transfer taxes.

Conversion calculations:

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

Number of shares of Preferred Stock owned prior to Conversion: \_\_\_\_\_

Number of shares of Preferred Stock to be Converted: \_\_\_\_\_

Aggregate Stated Value of shares of Preferred Stock to be Converted: \_\_\_\_\_

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

Applicable Conversion Price: \_\_\_\_\_

Number of shares of Preferred Stock subsequent to Conversion: \_\_\_\_\_

Address for Delivery: \_\_\_\_\_

or

DWAC Instructions:

DTC Participant: \_\_\_\_\_

DTC No: \_\_\_\_\_

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

[HOLDER]

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

Name:

Title:

Date: \_\_\_\_\_, \_\_\_\_\_