UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 30, 2022

IVERIC bio, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-36080 (Commission File Number) 20-8185347 (IRS Employer Identification No.)

8 Sylvan Way Parsippany, NJ 07054

(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (609) 474-6455

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

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

	Trading	Name of each exchange on which
Title of each class	Symbol(s)	registered
Common stock, par value \$0.001 per share	ISEE	The Nasdaq Global Select Market

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

Emerging growth company \Box

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. \Box

Item 1.01. Entry into a Material Definitive Agreement.

Underwriting Agreement

On November 30, 2022, IVERIC bio, Inc. (the "Company") entered into an underwriting agreement (the "Underwriting Agreement") with Morgan Stanley & Co. LLC, BofA Securities, Inc. and Cowen and Company, LLC, as representatives of the several underwriters named therein (collectively, the "Underwriters"), relating to an underwritten public offering of 13,350,000 shares (the "Firm Shares") of the Company's common stock, \$0.001 par value per share (the "Common Stock"). Under the terms of the Underwriting Agreement, the Underwriters subsequently exercised an option to purchase an additional 2,002,500 shares of Common Stock (the "Optional Shares" and, together with the Firm Shares, the "Shares"). The closing of the offering and sale of the Shares to the Underwriters is expected to take place on or about December 5, 2022, subject to the satisfaction of customary closing conditions. All of the Shares will be sold by the Company. The offering price of the Shares to the public is \$22.50 per share. The Underwriters will purchase the Shares from the Company pursuant to the Underwriting Agreement at a price of \$21.15 per share. The Company estimates that the net proceeds from the offering, after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company, will be approximately \$324.3 million. The Shares will be issued pursuant to an automatically effective shelf registration statement on Form S-3 that was filed with the Securities and Exchange Commission (the "SEC") on October 21, 2021 (File No. 333-260406).

The foregoing description of the terms of the Underwriting Agreement is qualified in its entirety by reference to the Underwriting Agreement, which is attached as Exhibit 1.1 hereto and is herein incorporated by reference.

A copy of the legal opinion and consent of Wilmer Cutler Pickering Hale and Dorr LLP relating to the Shares is attached as Exhibit 5.1 hereto.

The representations, warranties and covenants contained in the Underwriting Agreement were made solely for the benefit of the parties thereto and may be subject to limitations agreed upon by the contracting parties. Accordingly, the Underwriting Agreement is incorporated by reference only to provide investors with information regarding the Company or its business, and should be read in conjunction with the disclosures in the Company's periodic reports and other filings with the SEC.

Item 8.01. Other Events.

The Company issued a press release announcing the pricing of the offering on November 30, 2022, which press release is attached as Exhibit 99.1 hereto and is incorporated herein by reference.

As of September 30, 2022, the Company had cash, cash equivalents and available-for-sale securities of \$320.5 million, inclusive of the \$50.0 million the Company borrowed in July 2022 under the Loan and Security Agreement with Hercules Capital, Inc. ("Hercules") and Silicon Valley Bank ("SVB"), providing for term loans in an aggregate principal amount of up to \$250.0 million under multiple tranches (the "2022 Term Loan Facility"). The Company believes it has achieved the first performance milestone under the 2022 Term Loan Facility and plans to borrow the full \$50.0 million tranche available as a result during the fourth quarter of 2022. If the Company achieves the second performance milestone under the 2022 Term Loan Facility, which is based on the Company's submission of a new drug application ("NDA") to the U.S. Food and Drug Administration ("FDA") for avacincaptad pegol in Geographic Atrophy ("GA") and FDA acceptance of such NDA for review, the Company plans to borrow the full \$25.0 million tranche that will become available as a result during 2023.

Based upon the Company's current operating plan, the Company estimates that the net proceeds from the offering, together with the \$75.0 million it plans to borrow under the 2022 Term Loan Facility in relation to the first and second milestones, and its existing cash, cash equivalents and available-for salesecurities, will be sufficient to fund the Company's planned capital expenditure requirements, debt service obligations and operating expenses, including those necessary for the potential commercial launch of avacincaptad pegol in GA in the United States, subject to regulatory approval, through at least mid-2024. These estimates are based on the Company's current business plan, including the continuation of its ongoing clinical development programs for avacincaptad pegol in GA secondary to age-related macular degeneration ("AMD") and autosomal recessive Stargardt disease ("STGD1"), including the recently initiated open-label extension study, submission of an NDA and a marketing authorization application for avacincaptad pegol in GA, continuing preparations for potential commercialization and launch of avacincaptad pegol for GA in the United States, including the hiring and associated expenses of a commercial engagement team, including sales force members, of approximately 125 individuals, payment of a \$23.0 million milestone to Archemix Corp. upon regulatory approval of avacincaptad pegol in the United States for GA, pursuing DelSiTech Ltd.'s silica-based sustained release delivery technology and exploring additional sustained release delivery technologies for avacincaptad pegol, and the advancement of the Company's IC-500 development program up to a potential investigational new drug application. These estimates do not include any additional borrowings under the 2022 Term Loan Facility beyond the \$75.0 million in relation to the first and second milestones. Also excluded from these estimates are any other potential approval or sales milestones payable to Archemix Corp., any additional expenditures related to potentially studying avacincaptad pegol outside of GA or STGD1 or in patients with intermediate AMD, or resulting from the potential in-licensing or acquisition of additional product candidates or technologies, or any associated development the Company may pursue. The Company has based this estimate on assumptions that may prove to be wrong, and the Company could use its available capital resources sooner than it currently expects. See the "Risk Factors" section of the reports the Company files with the SEC for a discussion of the risks affecting the Company's business that could have an adverse effect on its available capital resources.

Forward-Looking Statements

Any statements in this Current Report on Form 8-K about the Company's future expectations, plans and prospects, including statements regarding the offering, the sufficiency of the Company's cash resources and the Company's expectations regarding future borrowings under its Loan and Security Agreement with Hercules Capital, Inc. and Silicon Valley Bank, constitute forward-looking statements for purposes of the safe harbor provisions under the Private Securities Litigation Reform Act of 1995. Forward-looking statements include any statements about the Company's strategy, future operations and future expectations and plans and prospects for the Company, and any other statements containing the words "anticipate," "believe," "goals," "estimate," "expect," "intend," "may," "might," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions. Such forward-looking statements involve substantial risks and uncertainties that could cause the Company's development programs, future results, performance or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the potential completion of the offering, satisfaction of customary closing conditions related to the offering, those related to the actual and expected effects of the COVID-19 pandemic, other macro-economic events and related response measures on the Company's business and operations, the timing, costs, conduct and outcome of the Company's ongoing and planned research and preclinical development activities and clinical trials, the Company's ability to establish and maintain capabilities and capacity for the manufacture of its product candidates, the Company's competitive position, the Company's expectations regarding the market dynamics for treatments for GA and other commercial matters, the Company's personnel and human capital resources, need for, and ability to obtain, additional financing, plans and ability to consummate business development transactions, whether the Company's cash resources will be sufficient to fund its foreseeable and unforeseeable operating expenses and capital requirements on its expected timelines, and other factors discussed in the "Risk Factors" section contained in the reports that the Company files with the Securities and Exchange Commission. Any forward-looking statements represent the Company's views only as of the date of this Current Report on Form 8-K. The Company anticipates that subsequent events and developments may cause its views to change. While the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so except as required by law.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description		
<u>1.1</u>	Underwriting Agreement, dated November 30, 2022, by and among IVERIC bio, Inc. and Morgan Stanley & Co. LLC, BofA Securities,		
	Inc. and Cowen and Company, LLC, as representatives of the underwriters named therein		
<u>5.1</u>	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP		
<u>23.1</u>	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)		
<u>99.1</u>	Press Release dated November 30, 2022		
104	Cover Page Interactive Data File - the cover page XBRL tags are embedded within the Inline XBRL document		

SIGNATURES

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

Date: December 5, 2022

IVERIC bio, INC.

By: /s/ David F. Carroll

David F. Carroll Senior Vice President, Chief Financial Officer and Treasurer

Execution Version

13,350,000 Shares

IVERIC BIO, INC.

COMMON STOCK, \$0.001 PAR VALUE PER SHARE

UNDERWRITING AGREEMENT

November 30, 2022

Morgan Stanley & Co. LLC BofA Securities, Inc. Cowen and Company, LLC

as Representatives of the several Underwriters listed in Schedule I hereto

c/o Morgan Stanley & Co. LLC 1585 Broadway New York, New York 10036

c/o BofA Securities, Inc. One Bryant Park New York, New York 10036

c/o Cowen and Company, LLC 599 Lexington Avenue New York, New York 10022

Ladies and Gentlemen:

IVERIC bio, Inc., a Delaware corporation (the "**Company**"), proposes to issue and sell to the several Underwriters named in Schedule I hereto (the "**Underwriters**"), for whom Morgan Stanley & Co. LLC, BofA Securities, Inc. and Cowen and Company, LLC are acting as representatives (the "**Representatives**"), an aggregate of 13,350,000 shares of the common stock of the Company, \$0.001 par value per share (the "**Firm Shares**"), and, at the option of the Underwriters, up to an additional 2,002,500 shares of the Company's common stock, par value \$0.001 per share (the "**Additional Shares**"). The Firm Shares and the Additional Shares are hereinafter collectively referred to as the "**Shares**." The shares of common stock, \$0.001 par value per share, of the Company to be outstanding after giving effect to the sales contemplated hereby are hereinafter referred to as the "**Common Stock**."

The Company has filed with the Securities and Exchange Commission (the "**Commission**") a registration statement, including a prospectus, on Form S-3 (File No. 333-260406), relating to the various securities (the "**Shelf Securities**"), including the Shares, to be issued from time to time by the Company. The registration statement as amended to the date of this Agreement, including the information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rule 430A or Rule 430B under the Securities Act of 1933, as amended (the "**Securities Act**"), is hereinafter referred to as the "**Registration Statement**," and the related prospectus covering the Shelf Securities dated October 21, 2021 in the form first used to confirm sales of the Shares (or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities (or in the form first used to confirm sales of the Shares in the form first used to confirm sales of the Shares in the form first used to confirm sales of the Shares in the form first used to confirm sales of the Shares as used available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act) is hereinafter referred to as the "**Basic Prospectus**." The Basic Prospectus, as supplemented by the prospectus supplement specifically relating to the Shares in the form first used to confirm sales of the Shares (or in the form first used to confirm sales of the Shares (or in the form first used to confirm sales of purchasers pursuant to Rule 173 under the Securities Act) is hereinafter referred to as the "**Prospectus**," and the term "**preliminary prospectus**" means any preliminary form of the Prospectus.



For purposes of this Agreement, "free writing prospectus" has the meaning set forth in Rule 405 under the Securities Act, "Time of Sale Prospectus" means the preliminary prospectus together with the documents and pricing information set forth in Schedule II hereto, and "broadly available road show" means a "bona fide electronic road show" as defined in Rule 433(h)(5) under the Securities Act that has been made available without restriction to any person. As used herein, the terms "Registration Statement," "Basic Prospectus," "preliminary prospectus," "Time of Sale Prospectus" and "Prospectus" shall include the documents, if any, incorporated by reference therein as of the date hereof. The terms "supplement," "amendment" and "amend" as used herein with respect to the Registration Statement, the Basic Prospectus, the Time of Sale Prospectus, any preliminary prospectus or the Prospectus shall include all documents subsequently filed by the Company with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are deemed to be incorporated by reference therein.

1. *Representations and Warranties.* The Company represents and warrants to and agrees with each of the Underwriters that:

(a) The Registration Statement has become effective; no stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose are pending before or, to the knowledge of the Company, threatened by the Commission. The Registration Statement is an automatic shelf registration statement as defined in Rule 405 under the Securities Act. The Company is a well-known seasoned issuer (as defined in Rule 405 under the Securities Act) eligible to use the Registration Statement as an automatic shelf registration statement, and the Company has not received notice that the Commission objects to the use of the Registration Statement as an automatic shelf registration statement.

(i) Each document, if any, filed or to be filed pursuant to the Exchange Act and incorporated by reference in the Time of Sale Prospectus (b)or the Prospectus complied or will comply when so filed in all material respects with the Exchange Act and the applicable rules and regulations of the Commission thereunder, (ii) each part of the Registration Statement, when such part became effective, did not contain and each such part, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (iii) the Registration Statement as of the date hereof does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (iv) the Registration Statement and the Prospectus comply and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder, (v) the Time of Sale Prospectus does not, and at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers and at the Closing Date (as defined in Section 4), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, (vi) each broadly available road show and "issuer free writing prospectus" (as defined in Rule 433 under the Securities Act), if any, when considered together with the Time of Sale Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading and (vii) the Prospectus does not contain and, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, except that the representations and warranties set forth in this paragraph do not apply to statements or omissions in the Registration Statement, the Time of Sale Prospectus or the Prospectus based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein.

(c) The Company is not an "ineligible issuer" in connection with the offering pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company complies or will comply in all material respects with the requirements of the Securities Act and the applicable rules and regulations of the Securities Act and the applicable rules and regulations of the Securities Act and the applicable rules and regulations of the Commission thereunder. Except for the free writing prospectuses, if any, identified in Schedule II hereto forming part of the Time of Sale Prospectus, and electronic road shows, if any, each furnished to you before first use, the Company has not prepared, used or referred to, and will not, without your prior consent, prepare, use or refer to, any free writing prospectus.

(d) The Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the State of Delaware, has the corporate power and authority to own or lease its property and to conduct its business as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not have a material adverse effect on the Company.

(e) The Company does not have any "subsidiaries", as defined in Regulation S-X, other than Orion Ophthalmology LLC, IVERIC bio Gene Therapy LLC and IVERIC bio Europe Limited, and does not have any "significant subsidiaries" (as defined in Regulation S-X).

(f) Each subsidiary of the Company has been duly formed, is validly existing as an entity in good standing under the laws of its respective jurisdiction of incorporation or organization, has the requisite power and authority to own its property and to conduct its business and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not have a material adverse effect on the Company and its subsidiaries, taken as a whole; all of the issued membership interests of the subsidiaries of the Company have been duly and validly authorized and issued, are fully paid and are owned directly by the Company, free and clear of all liens, encumbrances, equities or claims.

(g) This Agreement has been duly authorized, executed and delivered by the Company.

(h) The authorized capital stock of the Company conforms in all material respects as to legal matters to the description thereof contained in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus.

(i) The shares of Common Stock outstanding prior to the issuance of the Shares have been duly authorized and are validly issued, fully paid and non-assessable.

(j) The Shares have been duly authorized and, when issued and delivered in accordance with the terms of this Agreement, will be validly issued, fully paid and non-assessable, and the issuance of such Shares will not be subject to any preemptive or similar rights that have not been validly waived.

(k) The Company and its subsidiaries are not in violation or default (i) of any provisions of the Company's certificate of incorporation or bylaws, (ii) of any judgment, order, writ or decree of any court, governmental body or arbitrator, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which the Company or its subsidiaries are a party or by which the Company or its subsidiaries are bound, or, of any provision of federal or state statute, rule or regulation applicable to the Company or its subsidiaries, in the case of clauses (iii) and (iv), the violation of which would have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(1) The execution and delivery by the Company of, and the performance by the Company of its obligations under, this Agreement will not contravene any provision of applicable law or the certificate of incorporation or by-laws of the Company or its subsidiaries or any agreement or other instrument binding upon the Company that is material to the Company and its subsidiaries, taken as a whole, or any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company or its subsidiaries, and no consent, approval, authorization or order of, or qualification with, any governmental body or agency is required for the performance by the Company of its obligations under this Agreement, except such as have already been obtained or made or as may be required by the securities or Blue Sky laws of the various states in connection with the offer and sale of the Shares.

(m) There has not occurred any material adverse change, or any development that would reasonably be expected to result in a material adverse change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus.

(n) There are no legal or governmental proceedings pending or, to the knowledge of the Company, threatened to which the Company is a party or to which any of the properties of the Company or its subsidiaries are subject (i) other than proceedings accurately described in all material respects in the Registration Statement, the Time of Sale Prospectus and the Prospectus and proceedings that would not have a material adverse effect on the Company and its subsidiaries, taken as a whole, or on the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by each of the Registration Statement, the Time of Sale Prospectus or the Prospectus and are not so described; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement, the Time of Sale Prospectus or to be filed as exhibits to the Registration Statement that are not described or filed as required.

(o) Each preliminary prospectus filed as part of the Registration Statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the Securities Act, complied when so filed in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder.

(p) The Company is not, and after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(q) The Company and its subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws"), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, singly or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(r) There are no costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties) which would, singly or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(s) Except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company or to require the Company to include such securities with the Shares registered pursuant to the Registration Statement, other than rights that have been validly waived.

(t) (i) Neither the Company nor its subsidiaries, nor, to the Company's knowledge, any of its affiliates, any director, officer, or employee of the Company, or any agent or representative of the Company or of any of its subsidiaries or affiliates, have taken or will take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment, or giving or receipt of money, property, gifts or anything else of value, directly or indirectly, to any "government official" (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) in order to influence official action, or to any person in violation of any applicable anti-corruption laws; (ii) the Company and each of its subsidiaries, and, to the Company's knowledge, its affiliates have conducted their businesses in compliance with applicable anti-corruption laws and have instituted and maintained and will continue to maintain policies and procedures designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; and (iii) neither the Company nor any of its subsidiaries will use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-corruption laws.

(u) The operations of the Company and its subsidiaries are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company and its subsidiaries conduct business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Anti-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 or its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(v) (i) Neither the Company nor its subsidiaries nor, to the Company's knowledge, any director, officer, or employee of the Company or its subsidiaries or any agent, affiliate or representative of the Company or its subsidiaries, is an individual or entity ("**Person**") that is, or is owned or controlled by a Person that is:

(A) the subject of any sanctions administered or enforced by the U.S. Department of Treasury's Office of Foreign Assets Control ("**OFAC**"), the United Nations Security Council ("**UNSC**"), the European Union ("**EU**"), His Majesty's Treasury ("**HMT**"), the Swiss Secretariat of Economic Affairs ("**SSEA**") or other relevant sanctions authority (collectively, "**Sanctions**"), nor

(B) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, the so-called Donetsk People's Republic, the so-called Luhansk People's Republic, Crimea, Cuba, Iran, North Korea and Syria).

(ii) The Company will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person:

(A) to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or

(B) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(iii) For the past 5 years, the Company and its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(w) Subsequent to the respective dates as of which information is given in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company has not incurred any material liability or obligation, direct or contingent, nor entered into any material transaction; (ii) the Company has not purchased any of its outstanding capital stock other than purchases of restricted common stock of the Company pursuant to contractual rights of the Company in connection with the termination of the employment with the Company of the holders thereof, nor declared, paid or otherwise made any dividend or distribution of any kind on its capital stock other than ordinary and customary dividends; and (iii) there has not been any material change in the capital stock, short-term debt or long-term debt of the Company, except in each case as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, respectively.

(x) The Company and its subsidiaries do not own any real property. The Company has good title to all personal property owned by it which is material to the business of the Company or its subsidiaries, as the case may be, free and clear of all liens, encumbrances and defects except such as are described in the Time of Sale Prospectus or such 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 or its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are held by the Company or such subsidiary under valid, subsisting and enforceable leases with such exceptions as are not material and do not materially interfere with the use made and proposed to be made of such property and buildings by the Company or its subsidiaries, in each case except as described in the Time of Sale Prospectus.

(y) Except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the Company and its subsidiaries own or possess, or can acquire on reasonable terms, adequate rights to all patents, patent rights, inventions, trademarks, service marks, trade names, domain names, goodwill associated with the foregoing, copyrights, licenses and know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures) and other intellectual property rights, including registrations and applications for registration thereof (collectively, "**Intellectual Property**") necessary for the conduct of the business of the Company and its subsidiaries in all material respects as currently conducted and as proposed to be conducted, and, to the knowledge of the Company, the conduct of the business of the Company has not conflicted with, infringed, misappropriated or otherwise violated, and will not conflict with, infringe, misappropriate or otherwise violate, any Intellectual Property of any third party in any material respect. Except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the Company has not received any written notice of, and are not otherwise aware of, any pending or threatened claim of infringement, misappropriation or other violation of any Intellectual Property of any third party or any written notice challenging the validity, scope or enforceability of their respective Intellectual Property or rights therein, in each case which, individually or in the aggregate, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole. The Company is not aware of any specific facts or combination of facts that would support a finding that any of the material issued or granted patents owned by or licensed to the Company is invalid or unenforceable and, to the knowledge of the Company, all such issued or granted patents are valid and enforceabl

(z) No material labor dispute with the employees of the Company or its subsidiaries exists, except as described in the Time of Sale Prospectus, or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that would be reasonably likely to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(a) (i) Each of the Company and its subsidiaries has complied and is presently in compliance with all internal privacy policies, contractual obligations, industry standards, applicable laws, statutes, judgments, orders, rules and regulations of any court or arbitrator or other governmental or regulatory authority and any other legal obligations, in each case, relating to the collection, use, transfer, import, export, storage, protection, disposal and disclosure by the Company of personal, personally identifiable, sensitive, confidential or regulated data ("**Data Security Obligations**", and such data, "**Data**") except where such noncompliance would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole; (ii) the Company has not received any notification of or complaint regarding and is unaware of any other facts that, individually or in the aggregate, would reasonably indicate non-compliance with any Data Security Obligation; and (iii) there is no action, suit or proceeding by or before any court or governmental agency, authority or body pending or, to the Company's knowledge, threatened alleging non-compliance with any Data Security Obligation.

(bb) Each of the Company and its subsidiaries has taken all reasonable technical and organizational measures necessary to protect the information technology systems and Data used in connection with the operation of the Company's and its subsidiaries' businesses, except where such noncompliance would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole. Without limiting the foregoing, the Company and its subsidiaries have used reasonable efforts to establish and maintain, and have established, maintained, implemented, and complied with, reasonable information technology, information security, cyber security and data protection controls, policies and procedures, including oversight, access controls, encryption, technological and physical safeguards and business continuity/disaster recovery and security plans that are designed to protect against and prevent breach, destruction, loss, unauthorized distribution, use, access, disablement, misappropriation or modification, or other compromise or misuse of or relating to any information technology system or Data used in connection with the operation of the Company's and its subsidiaries' businesses ("**Breach**"). There has been no such Breach that is material to the Company and its subsidiaries, taken as a whole, and the Company and its subsidiaries have not been notified of and have no knowledge of any event or condition that would reasonably be expected to result in, any such Breach.

(cc) The Company and its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which they are engaged; the Company and its subsidiaries have not been refused any insurance coverage sought or applied for; and the Company does not have any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a material adverse effect on the Company and its subsidiaries, taken as a whole, except as described in the Time of Sale Prospectus.

(dd) The Company possesses all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct its business, and the Company has not received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a material adverse effect on the Company, except as described in the Time of Sale Prospectus. Except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, as applicable, each of the Company and its subsidiaries (i) is, and at all times has been, in compliance with all statutes, rules and regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, storage, import, export or disposal of any product manufactured or distributed by the Company or its subsidiaries ("**Applicable Regulatory Laws**"), except where such noncompliance would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole; and (ii) has not received any U.S. Food and Drug Administration ("**FDA**") Form 483, written notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from any court or arbitrator or governmental or regulatory authority alleging or asserting non-compliance with (x) any Applicable Regulatory Laws or (y) any licenses, exemptions, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Regulatory Laws.

(i) The clinical trials and pre-clinical research and development activities conducted by or on behalf of or sponsored by the Company, or (ee) in which the Company has participated, that are described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, or the results of which are referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus, as applicable, were, and if still pending are, to the knowledge of the Company, being conducted in all material respects in accordance with standard medical and scientific research standards and procedures for products or product candidates comparable to those being developed by the Company and all applicable statutes and all applicable rules and regulations of the FDA and comparable regulatory agencies outside of the United States to which they are subject, including the European Medicines Agency (collectively, the "Regulatory Authorities"), and current Good Clinical Practices and Good Laboratory Practices, if applicable; (ii) the descriptions in the Registration Statement, the Time of Sale Prospectus and the Prospectus of the results of such trials and pre-clinical research and development activities are accurate and complete descriptions in all material respects and fairly present the data derived therefrom; (iii) the Company has no knowledge of any Company-sponsored trials and research and development activities not described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the results of which are inconsistent with or call into question the results described or referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus; (iv) the Company has operated at all times and is currently in compliance in all material respects with all applicable statutes, rules and regulations of the Regulatory Authorities; and (v) except as described in the Time of Sale Prospectus, the Company has not received any written notices, correspondence or other communications from the Regulatory Authorities or any other governmental agency requiring or threatening the termination, material modification or suspension of any clinical trials or pre-clinical research and development activities that are described in the Registration Statement, the Time of Sale Prospectus and the Prospectus or the results of which are referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus, other than ordinary course communications with respect to modifications in connection with the design and implementation of such trials, and, to the Company's knowledge, there are no reasonable grounds for the same.

(ff) The Company has not failed to file with the Regulatory Authorities any required filing, declaration, listing, registration, report or submission with respect to the Company's product candidates that are described or referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus; all such filings, declarations, listings, registrations, reports or submissions were in material compliance with applicable laws when filed; and no deficiencies regarding compliance with applicable law have been asserted by any applicable regulatory authority with respect to any such filings, declarations, listings, reports or submissions.

(gg) To the knowledge of the Company, the statements included in the Company's Form 10-Q for the period ended September 30, 2022 under the captions "Risk Factors—Risks Related to Regulatory Approval of our Products" and "Risk Factors—Risks Related to Legal and Compliance Matters" and in the Company's Form 10-K for the fiscal year ended December 31, 2021 under the caption "Business— Government Regulation and Product Approvals," incorporated by reference in the Time of Sale Prospectus and the Prospectus, in each case, fairly summarize the matters described therein in all material respects.

(h) The Company's audited financial statements (including balance sheet, income statement, statement of cash flows and statement of stockholders' equity) as of December 31, 2021 and for the fiscal year ended December 31, 2021 and its unaudited financial statements (including balance sheet, income statement and statement of cash flows) as of September 30, 2022 and for the three- and nine-month periods ended September 30, 2022 (collectively, the "**Financial Statements**") have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated, except that the unaudited Financial Statements may not contain all footnotes required by generally accepted accounting principles. The Financial Statements are consistent with the books and records of the Company (which books and records are accurate and complete in all material respects) and fairly present in all material respects the financial condition and operating results of the Company as of the dates, and for the periods, indicated therein, subject in the case of the unaudited Financial Statements to normal year-end audit adjustments. Except as set forth in the Financial Statements, the Company has no material liabilities or obligations, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business and (iii) liabilities and obligations of a type or nature not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in all such cases, individually and in the aggregate would not have a material adverse effect on the Company and its subsidiaries, taken as a whole. The Company maintains and will continue to maintain a standard system of accounting established and administered in accordance with generally accepted accounting principles.

(ii) The Company and its subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with 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; (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; and (v) the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement is accurate. Except as described in the Time of Sale Prospectus, since the end of the Company's most recent audited fiscal year, there has been (i) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (ii) no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(jj) The Company and its subsidiaries maintain an effective system of "disclosure controls and procedures" (as defined in Rule 13a-15(e) of the Exchange Act) that complies with the requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Company in reports that 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, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosure. The Company has carried out evaluations of the effectiveness of its disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act.

(kk) Except as described in the Time of Sale Prospectus, the Company has not sold, issued or distributed any shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A under, or Regulation D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans or pursuant to outstanding options, rights or warrants.

(ll) The Company and its subsidiaries have filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have requested extensions thereof (except where the failure to file would not, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole) and have paid all taxes required to be paid thereon (except for cases in which the failure to file or pay would not have a material adverse effect on the Company and its subsidiaries, taken as a whole) and have paid all taxes required to be paid thereon (except for cases in which the failure to file or pay would not have a material adverse effect on the Company and its subsidiaries, taken as a whole or, except as currently being contested in good faith and for which reserves required by U.S. GAAP have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company which has had (nor does the Company have any notice or knowledge of any tax deficiency which could reasonably be expected to be determined adverse effect on the Company and which would reasonably be expected to have) a material adverse effect on the Company and its subsidiaries, taken as a whole.

(mm) The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(nn) The Company (i) has not alone engaged in any Testing-the-Waters Communication with any person other than Testing-the-Waters Communications with the consent of the Representatives with entities that are reasonably believed to be qualified institutional buyers within the meaning of Rule 144A under the Securities Act or institutions that are reasonably believed to be accredited investors within the meaning of Rule 501 under the Securities Act and (ii) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act other than those listed on Schedule III hereto. **"Testing-the-Waters Communication"** means any communication with potential investors undertaken in reliance on Section 5(d) or Rule 163B of the Securities Act.

2. Agreements to Sell and Purchase. Upon the basis of the representations and warranties herein contained, but subject to the terms and conditions hereinafter stated, the Company hereby agrees to sell to the several Underwriters, and each Underwriter, severally and not jointly, hereby agrees to purchase from the Company, at \$21.15 a share (the "Share Purchase Price"), the number of Firm Shares that bears the same proportion to the number of Firm Shares set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of Firm Shares.

On the basis of the representations and warranties contained in this Agreement, and subject to its terms and conditions, the Company agrees to sell to the Underwriters the Additional Shares, and the Underwriters shall have the right to purchase, severally and not jointly, up to 2,002,500 Additional Shares at the Share Purchase Price; *provided, however*, that the amount paid by the Underwriters for any Additional Shares shall be reduced by an amount per share equal to any dividends declared by the Company and payable on the Firm Shares but not payable on such Additional Shares. You may exercise this right on behalf of the Underwriters in whole or from time to time in part by giving written notice not later than 30 days after the date of this Agreement. Any exercise notice shall specify the number of Additional Shares to be purchased by the Underwriters and the date on which such shares are to be purchased. Each purchase date must be at least one business day after the written notice is given and may not be earlier than the closing date for the Firm Shares nor later than ten business days after the date of such notice. Additional Shares may be purchased as provided in Section 4 hereof solely for the purpose of covering sales of shares in excess of the number of the Firm Shares. On each day, if any, that Additional Shares are to be purchased (an "**Option Closing Date**"), each Underwriter agrees, severally and not jointly, to purchase the number of Additional Shares to be purchased on such Option Closing Date as the number of Firm Shares set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of Firm Shares.

3. *Terms of Public Offering*. The Company is advised by you that the Underwriters propose to make a public offering of their respective portions of the Shares as soon as this Agreement has become effective as in your judgment is advisable. The Company is further advised by you that the Shares are to be offered to the public initially at \$22.50 a share (the "**Public Share Offering Price**") and to certain dealers selected by you at a price that represents a concession not in excess of \$0.81 a share under the Public Share Offering Price.

4. *Payment and Delivery.* Payment for the Firm Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Firm Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on December 5, 2022, or at such other time on the same or such other date, not later than December 12, 2022, as shall be designated in writing by you. The time and date of such payment are hereinafter referred to as the "**Closing Date**."

Payment for any Additional Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Additional Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on the date specified in the corresponding notice described in Section 2 or at such other time on the same or on such other date, in any event not later than January 4, 2022, as shall be designated in writing by you.

The Firm Shares and the Additional Shares shall be registered in such names and in such denominations as you shall request in writing not later than one full business day prior to the Closing Date or the applicable Option Closing Date, as the case may be. The Firm Shares and the Additional Shares shall be delivered to you on the Closing Date or an Option Closing Date, as the case may be, for the respective accounts of the several Underwriters, with any transfer taxes payable in connection with the transfer of the Shares to the Underwriters duly paid, against payment of the Share Purchase Price therefor.

5. *Conditions to the Underwriters' Obligations.* The obligations of the Company to sell the Shares to the Underwriters and the several obligations of the Underwriters to purchase and pay for the Shares on the Closing Date are subject to the following conditions:

(a) Subsequent to the execution and delivery of this Agreement and prior to the Closing Date:

(i) no order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose or pursuant to Section 8A under the Securities Act shall be pending before or threatened by the Commission;

(ii) there shall not have occurred any downgrading, nor shall any notice have been given of any intended or potential downgrading or of any review for a possible change that does not indicate the direction of the possible change, in the rating accorded any of the securities of the Company or its subsidiaries by any "nationally recognized statistical rating organization," as such term is defined in Section 3(a)(62) of the Exchange Act; and

(iii) there shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company or its subsidiaries from that set forth in the Time of Sale Prospectus that, in your judgment, is material and adverse and that makes it, in your judgment, impracticable to market the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus.

(b) The Underwriters shall have received on the Closing Date a certificate, dated the Closing Date and signed by an executive officer of the Company on behalf of the Company, to the effect set forth in Section 5(a)(i) and 5(a)(ii) above and to the effect that the representations and warranties of the Company contained in this Agreement are true and correct as of the Closing Date and that the Company has complied with all of the agreements and satisfied all of the conditions on its part to be performed or satisfied hereunder on or before the Closing Date.

The officers signing and delivering such certificates may rely upon the best of his or her knowledge as to proceedings threatened.

(c) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Wilmer Cutler Pickering Hale and Dorr LLP, outside counsel for the Company, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives.

(d) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Davis Polk & Wardwell LLP, counsel for the Underwriters, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives.

(e) The Underwriters shall have received on the Closing Date an opinion of Haug Partners, primary intellectual property counsel for the Company, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives.

(f) The Underwriters shall have received on the Closing Date an opinion of Cooley LLP, intellectual property counsel for the Company, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives.

The opinion of Wilmer Cutler Pickering Hale and Dorr LLP described in Section 5(c) above, the opinion of Haug Partners described in Section 5(e) above and the opinion of Cooley LLP described in Section 5(f) above shall be rendered to the Underwriters at the request of the Company and shall so state therein.

(g) The Underwriters shall have received, on each of the date hereof and the Closing Date, a letter dated the date hereof or the Closing Date, as the case may be, in form and substance satisfactory to the Underwriters, from Ernst & Young LLP, independent public accountants, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus; *provided* that the letter delivered on the Closing Date shall use a "cut-off date" not earlier than the date hereof.

(h) The "lock-up" agreements, each substantially in the form of Exhibit A hereto, between you and certain officers and directors of the Company relating to sales and certain other dispositions of shares of Common Stock or certain other securities, delivered to you on or before the date hereof, shall be in full force and effect on the Closing Date.

(i) The Underwriters shall have received on the Closing Date a certificate of the chief financial officer of the Company on behalf of the Company with respect to certain financial information contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus, in form and substance reasonably satisfactory to the Representatives.

The several obligations of the Underwriters to purchase Additional Shares hereunder are subject to the delivery to you on the applicable Option Closing Date of the following:

(i) a certificate, dated the Option Closing Date and signed on behalf of the Company by an executive officer of the Company, confirming that the certificate delivered on the Closing Date pursuant to Section 5(b) hereof remains true and correct as of such Option Closing Date;

(ii) an opinion and negative assurance letter of Wilmer Cutler Pickering Hale and Dorr LLP, outside counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to substantially the same effect as the opinion and negative assurance letter required by Section 5(c) hereof;

(iii) an opinion and negative assurance letter of Davis Polk & Wardwell LLP, counsel for the Underwriters, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion and negative assurance letter required by Section 5(d) hereof;

(iv) an opinion of Haug Partners, primary intellectual property counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(e) hereof;

(v) an opinion of Cooley LLP, intellectual property counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(f) hereof;

(vi) a letter dated the Option Closing Date, in form and substance satisfactory to the Underwriters, from Ernst & Young LLP, independent public accountants, substantially in the same form and substance as the letter furnished to the Underwriters pursuant to Section 5(g) hereof; *provided* that the letter delivered on the Option Closing Date shall use a "cut-off date" not earlier than three business days prior to such Option Closing Date; and

(vii) a certificate, dated the Option Closing Date and signed by the chief financial officer of the Company on behalf of the Company, confirming that the certificate delivered on the Closing Date pursuant to Section 5(i) hereof remains true and correct as of such Option Closing Date; and

(viii) such other documents as you may reasonably request with respect to the good standing of the Company, the due authorization and issuance of the Additional Shares to be sold on such Option Closing Date and other matters related to the issuance or sale of such Additional Shares.

6. *Covenants.* The Company covenants with each Underwriter as follows:

(a) To furnish to you, without charge, two signed copies of the Registration Statement (including exhibits thereto and documents incorporated by reference) during the period mentioned in Section 6(e) or 6(f) below, as many copies of the Time of Sale Prospectus, the Prospectus, any documents incorporated by reference therein and any supplements and amendments thereto or to the Registration Statement as you may reasonably request.

(b) Before amending or supplementing the Registration Statement, the Time of Sale Prospectus or the Prospectus, to furnish to you a copy of each such proposed amendment or supplement and not to file any such proposed amendment or supplement to which you reasonably object.

(c) To furnish to you a copy of each proposed free writing prospectus (including any broadly available road show) to be prepared by or on behalf of, used by, or referred to by the Company and not to use or refer to any proposed free writing prospectus to which you reasonably object.

(d) Not to take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of the Underwriter that the Underwriter otherwise would not have been required to file thereunder.

(e) If the Time of Sale Prospectus is being used to solicit offers to buy the Shares at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus in order to make the statements therein, in the light of the circumstances, not misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement then on file, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not, in the light of the circumstances when the Time of Sale Prospectus is delivered to a prospective purchaser, be misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.

(f) If, during such period after the first date of the public offering of the Shares as in the opinion of counsel for the Underwriters the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is required by law to be delivered in connection with sales by an Underwriter or dealer, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, not misleading, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to the dealers (whose names and addresses you will furnish to the Company) to which Shares may have been sold by you on behalf of the Underwriters and to any other dealers upon request, either amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, be misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law.

(g) To endeavor to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as you shall reasonably request; *provided* that in connection therewith the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction.

(h) To make generally available to the Company's security holders and to you as soon as practicable an earnings statement covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the date of this Agreement which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.

Whether or not the transactions contemplated in this Agreement are consummated or this Agreement is terminated, to pay or cause to be (i) paid all expenses incident to the performance of its obligations under this Agreement, including: (i) the fees, disbursements and expenses of the Company's counsel and the Company's accountants in connection with the registration and delivery of the Shares under the Securities Act and all other fees or expenses in connection with the preparation and filing of the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and amendments and supplements to any of the foregoing, including the filing fees payable to the Commission relating to the Shares (within the time required by Rule 456(b)(1), if applicable) including all printing costs associated therewith, and the mailing and delivering of copies thereof to the Underwriters and dealers, in the quantities hereinabove specified, (ii) all costs and expenses related to the transfer and delivery of the Shares to the Underwriters, including any transfer or other taxes payable thereon, (iii) the cost of printing or producing any Blue Sky or Legal Investment memorandum in connection with the offer and sale of the Shares under state securities laws and all reasonable expenses in connection with the qualification of the Shares for offer and sale under state securities laws as provided in Section 6(g) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky or Legal Investment memorandum, (iv) any expenses in connection with any offer and sale of the Shares outside of the United States, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection with offers and sales outside of the United States, (v) [reserved], (vi) all costs and expenses incident to listing the Shares on the Nasdaq Global Market, (vii) the cost, if any, of printing certificates representing the Shares, (viii) the costs and charges of any transfer agent, registrar or depositary, (ix) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Shares, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the representatives and officers of the Company and any such consultants, and one-half of the cost of any aircraft chartered in connection with the road show, (x) the document production charges and expenses associated with printing this Agreement and (xi) all other costs and expenses incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section. It is understood, however, that except as provided in this Section, Section 8 entitled "Indemnity and Contribution" and the last paragraph of Section 10 below, the Underwriters will pay all of their costs and expenses, including fees and disbursements of their counsel and any advertising expenses connected with any offers they may make.

(j) If at any time following the distribution of any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act there occurred or occurs an event or development as a result of which such Testing-the-Waters Communication 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 Representatives and will promptly amend or supplement, at its own expense, such Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

The Company also covenants with each Underwriter that, without the prior written consent of Morgan Stanley & Co. LLC and BofA Securities, Inc. on behalf of the Underwriters, it will not, during the period ending 60 days after the date of the Prospectus (the "**Restricted Period**"), (1) 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 Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, or (3) file any registration statement with the Commission relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, or in the case of (1), (2) or (3), publicly disclose the intention to undertake any such action with respect to shares of the Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock.

The restrictions contained in the preceding paragraph shall not apply to (a) the Shares to be sold hereunder; (b) the issuance by the Company of shares of Common Stock upon the exercise of an option or warrant, the vesting of any restricted stock units or the conversion of a security described in the Prospectus and outstanding on the date hereof; (c) any options and other awards granted under a stock incentive plan or stock purchase plan described in the Prospectus (and the issuance by the Company of shares of Common Stock upon the exercise or vesting thereof); (d) the filing by the Company of any registration statement on Form S-8 under the Securities Act or a successor form thereto relating to the shares of Common Stock granted pursuant to or reserved for issuance under any stock incentive plan or stock purchase plan described in the Prospectus; (e) the issuance by the Company of shares of Common Stock upon the Company's achievement of milestones under, or in consideration for or in lieu of potential future milestone payments or otherwise in connection with, existing licensing and/or acquisition agreements described in the Prospectus; (f) the issuance and sale of up to 500,000 shares of Common Stock at or above the then-prevailing market price in connection with a transaction that includes additional non-dilutive funding for the development of one or more of the Company's product candidates, provided that the recipient of such shares agrees not to sell, transfer or otherwise dispose of such shares for the remainder of the Restricted Period without the prior written consent of Morgan Stanley & Co. LLC and BofA Securities, Inc. on behalf of the Underwriters; (g) shares of Common Stock or other securities issued in connection with a transaction that includes a commercial relationship (including joint ventures, marketing or distribution arrangements, collaboration agreements, outlicenses, disposition agreements or intellectual property license agreements) or any acquisition of assets or not less than a majority or controlling portion of the equity of another entity, provided that (x) the aggregate number of shares of Common Stock issued pursuant to this clause (g) shall not exceed 5.0% of the total number of outstanding shares of Common Stock and (y) the recipient of any such shares of Common Stock and securities issued pursuant to this clause (g) during the Restricted Period shall enter into an agreement substantially in the form of Exhibit A hereto; or (h) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, provided that (i) such plan does not provide for the transfer of Common Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by the Company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Common Stock may be made under such plan during the Restricted Period.

7. *Covenants of the Underwriters*. Each Underwriter, severally and not jointly, covenants with the Company not to take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not be required to be filed by the Company thereunder, but for the action of the Underwriter.

8. Indemnity and Contribution. (a) The Company agrees to indemnify and hold harmless each Underwriter, each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act and each affiliate of any Underwriter within the meaning of Rule 405 under the Securities Act from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) that arise out of, or are based upon, any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus or any amendment or supplement thereto, any issuer free writing prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, any "road show" as defined in Rule 433(h) under the Securities Act, any "road show" as defined in Rule 433(h) under the Securities Act, a "road show", the Prospectus or any amendment or supplement thereto, or any Testing-the-Waters Communication, or arise out of, or are based upon, any such untrue statement or omission or alleged untrue statement or omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any such untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein, it being understood and agreed that the only such information furnished by the Underwriters through the Representatives consists of the information described as

(b) Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who sign the Registration Statement and each person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to such Underwriter, but only with reference to information relating to such Underwriter furnished to the Company in writing by such Underwriter through you expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any issuer free writing prospectus, road show or the Prospectus or any amendment or supplement thereto; *provided* that the parties hereto agree that such information consists solely of the following information in the Prospectus: (i) the last paragraph on the front cover page concerning the terms of the offering by the Underwriters (ii) the selling concession appearing in the tenth paragraph under the heading "Underwriting"; and (iii) the statements concerning the Underwriters contained in the sections entitled "Stabilization" and "Passive Market Making" under the heading "Underwriting."

In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity (c) may be sought pursuant to Section 8(a) or Section 8(b), such person (the "indemnified party") shall promptly notify the person against whom such indemnity may be sought (the "indemnifying party") in writing and the indemnifying party, upon request of the indemnified party, shall retain counsel reasonably satisfactory to the indemnified party to represent the indemnified party and any others the indemnifying party may designate in such proceeding and shall pay the reasonably incurred fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel or (ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood that the indemnifying party shall not, in respect of the legal expenses of any indemnified party in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonably incurred fees and expenses of more than one separate firm (in addition to any local counsel) for all such indemnified parties and that all such fees and expenses shall be reimbursed as they are incurred. Such firm shall be designated in writing by the Representatives, in the case of parties indemnified pursuant to Section 8(a) and by the Company, in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second and third sentences of this paragraph, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into (A) more than 60 days after receipt by the indemnifying party of such request and (B) more than 30 days after receipt by such indemnifying party of the proposed terms of such settlement and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding.

(d) To the extent the indemnification provided for in Section 8(a) or 8(b) is unavailable to an indemnified party or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each indemnifying party under such paragraph, in lieu of indemnifying such indemnified party thereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by clause 8(d)(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 8(d)(i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, 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 hand in connection with the offering of the Shares shall be deemed to be in the same respective proportions as the net proceeds from the offering of the Shares (before deducting expenses) received by the Company and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate Public Share Offering Price. The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Underwriters' respective obligations to contribute pursuant to this Section 8 are several in proportion to the respective number of Shares they have purchased hereunder, and not joint.

(e) The Company and the Underwriters agree that it would not be just or equitable if contribution pursuant to this Section 8 were 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 account of the equitable considerations referred to in Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages and liabilities referred to in Section 8(d) shall be deemed to include, subject to the limitations set forth above, 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 8, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public 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. The remedies provided for in this Section 8 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.

(f) The indemnity and contribution provisions contained in this Section 8 and the representations, warranties and other statements of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Underwriter, any person controlling any Underwriter or any affiliate of any Underwriter, or by or on behalf of the Company, its officers or directors or any person controlling the Company and (iii) acceptance of and payment for any of the Shares.

9. Termination. The Underwriters may terminate this Agreement by notice given by you to the Company, if after the execution and delivery of this Agreement and prior to the Closing Date or any Option Closing Date, as the case may be, (i) trading generally shall have been suspended or materially limited on, or by, as the case may be, any of the New York Stock Exchange, the NYSE American, the Nasdaq Global Market, the Chicago Board of Options Exchange, the Chicago Mercantile Exchange or the Chicago Board of Trade, (ii) trading of any securities of the Company shall have been suspended on any exchange or in any over-the-counter market, (iii) a material disruption in securities settlement, payment or clearance services in the United States shall have occurred, (iv) any moratorium on commercial banking activities shall have been declared by Federal or New York State authorities or (v) there shall have occurred any outbreak or escalation of hostilities, or any change in financial markets or any calamity or crisis that, in your judgment, is material and adverse and which, singly or together with any other event specified in this clause (v), makes it, in your judgment, impracticable or inadvisable to proceed with the offer, sale or delivery of the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus.

10. *Effectiveness; Defaulting Underwriters*. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

If, on the Closing Date or an Option Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Shares that it has or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of the Shares to be purchased on such date, the other Underwriters shall be obligated severally in the proportions that the number of Firm Shares set forth opposite their respective names in Schedule I bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as you may specify, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date; provided that in no event shall the number of Shares that any Underwriter has agreed to purchase pursuant to this Agreement be increased pursuant to this Section 10 by an amount in excess of one-ninth of such number of Shares without the written consent of such Underwriter. If, on the Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Firm Shares and the aggregate number of Firm Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Firm Shares to be purchased on such date, and arrangements satisfactory to you and the Company for the purchase of such Firm Shares are not made within 36 hours after such default, this Agreement shall terminate without liability on the part of any non-defaulting Underwriter or the Company. In any such case either you or the Company shall have the right to postpone the Closing Date, but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement, in the Time of Sale Prospectus, in the Prospectus or in any other documents or arrangements may be effected. If, on an Option Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Additional Shares and the aggregate number of Additional Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Additional Shares to be purchased on such Option Closing Date, the non-defaulting Underwriters shall have the option to (i) terminate their obligation hereunder to purchase the Additional Shares to be sold on such Option Closing Date or (ii) purchase not less than the number of Additional Shares that such non-defaulting Underwriters would have been obligated to purchase in the absence of such default. Any action taken under this paragraph shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

If this Agreement shall be terminated by the Underwriters, or any of them, because of any failure or refusal on the part of the Company to comply with the terms or to fulfill any of the conditions of this Agreement, or if for any reason the Company shall be unable to perform its obligations under this Agreement, the Company will reimburse the Underwriters or such Underwriters as have so terminated this Agreement with respect to themselves, severally, for all out-of-pocket expenses (including the fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with this Agreement or the offering contemplated hereunder.

11. *Entire Agreement*. (a) This Agreement, together with any contemporaneous written agreements and any prior written agreements (to the extent not superseded by this Agreement) that relate to the offering of the Shares, represents the entire agreement between the Company and the Underwriters with respect to the preparation of any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, the conduct of the offering, and the purchase and sale of the Shares.

(b) The Company acknowledges that in connection with the offering of the Shares: (i) the Underwriters have acted at arm's length, are not agents of, and owe no fiduciary duties to, the Company or any other person, (ii) the Underwriters owe the Company only those duties and obligations set forth in this Agreement and prior written agreements (to the extent not superseded by this Agreement), if any, (iii) the Underwriters may have interests that differ from those of the Company. The Company waives to the full extent permitted by applicable law any claims it may have against the Underwriters arising from an alleged breach of fiduciary duty in connection with the offering of the Shares, and (iv) none of the activities of the Underwriters in connection with the transactions contemplated herein constitutes a recommendation, investment advice, or solicitation of any action by the Underwriters with respect to any entity or natural person.

12. *Recognition of the U.S. Special Resolution Regimes.* (a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

For the purposes of this Section:

"BHC Act Affiliate" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k).

"Covered Entity" means any of the following:

- (i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);
- (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or

(iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

"Default Right" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

"U.S. Special Resolution Regime" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder

13. *Counterparts.* This Agreement may be signed in counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be an original and all of which together shall constitute one and the same instrument. The words "execution," "signed," "signature," and words of like import in this Agreement or in any other certificate, agreement or document related to this Agreement or the offering and sale of the Shares shall include images of manually executed signatures transmitted by facsimile or other electronic format (including, without limitation, "pdf", "tif" or "jpg") and other electronic signatures (including, without limitation, DocuSign and AdobeSign). The use of electronic signatures and electronic records (including, without limitation, any contract or other record created, generated, sent, communicated, received, or stored by electronic means) shall be of the same legal effect, validity and enforceability as a manually executed signature or use of a paperbased record-keeping system to the fullest extent permitted by applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act and any other applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

14. *Applicable Law.* This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York.

15. *Headings*. The headings of the sections of this Agreement have been inserted for convenience of reference only and shall not be deemed a part of this Agreement.

16. *Waiver of Jury Trial.* Each of the Company and the Underwriters hereby waives any right to trial by jury in any suit or proceeding arising out of or relating to this Agreement.

17. *Notices*. All communications hereunder shall be in writing and effective only upon receipt and if to the Underwriters shall be delivered, mailed or sent to you in care of Morgan Stanley & Co. LLC, 1585 Broadway, New York, New York 10036, Facsimile: (212) 507-8999, Attention: Equity Syndicate Desk, with a copy to the Legal Department, BofA Securities, Inc., One Bryant Park New York, New York 10036, Email: <u>dg.ecm_execution_services@bofa.com</u>, Attention: Syndicate Department, with a copy to: Email: <u>dg.ecm_legal@bofa.com</u>, Attention: ECM Legal, and Cowen and Company, LLC, Attention: Head of Equity Capital Markets (fax: (646) 562-1249), with a copy to the General Counsel (fax: (646) 562-1124); if to the Company shall be delivered, via electronic mail to notices@ivericbio.com, Attention: General Counsel.

Very truly yours,

IVERIC BIO, INC.

By:

/s/ David Carroll Name: David Carroll Title: Chief Financial Officer Accepted as of the date hereof

MORGAN STANLEY & CO. LLC BOFA SECURITIES, INC. COWEN AND COMPANY, LLC

Acting severally on behalf of themselves and the several Underwriters named in Schedule I hereto.

Morgan Stanley & Co. LLC

By: /s/ Chirag D. Surti Name: Chirag D. Surti Title: Vice President

BofA Securities, Inc.

By: /s/ Greg Butz Name: Greg Butz Title: Managing Director

Cowen and Company, LLC

By: /s/ Bill Follis Name: Bill Follis Title: Managing Director

SCHEDULE I

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Underwriter	Number of Firm Shares To Be Purchased
Morgan Stanley & Co. LLC	5,126,400
BofA Securities, Inc.	3,511,050
Cowen and Company, LLC	2,843,550
Stifel, Nicolaus & Company, Incorporated	1,602,000
Wedbush Securities Inc.	267,000
Total:	13,350,000

I-1

Time of Sale Prospectus

- 1. Preliminary Prospectus issued November 30, 2022
- Pricing Information Provided Orally by Underwriters
 Public Offering Price per Share: \$22.50
 Share Purchase Price: \$21.15
 Number of Firm Shares: 13,350,000
 Number of Additional Shares: 2,002,500

II-1

Testing-the-Waters Communication

1. Investor Presentation dated November 2022

FORM OF LOCK-UP LETTER

November 30, 2022

Morgan Stanley & Co. LLC BofA Securities, Inc.

c/o Morgan Stanley & Co. LLC 1585 Broadway New York, New York 10036

c/o BofA Securities, Inc. One Bryant Park New York, New York 10036

Ladies and Gentlemen:

The understands that Morgan Stanley & Co. LLC and BofA Securities, Inc. propose to enter into an Underwriting Agreement (the "Underwriting Agreement") with IVERIC bio, Inc., a Delaware corporation (the "Company"), providing for the public offering (the "Public Offering") by the several Underwriters, including Morgan Stanley & Co. LLC and BofA Securities, Inc. (the "Underwriters"), of shares of the Common Stock, \$0.001 par value per share of the Company (the "Common Stock").

A-1

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of Morgan Stanley & Co. LLC and BofA Securities. Inc. on behalf of the Underwriters, it will not, during the period commencing on the date hereof and ending 60 days after the date of the final prospectus (the "Restricted Period") relating to the Public Offering (the "Prospectus"), (1) 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 Common Stock beneficially owned (as such term is used in Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the "Exchange Act")), by the undersigned or any other securities so owned convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition of shares of Common Stock. The foregoing sentence shall not apply to (a) transfers or dispositions of shares of Common Stock acquired in the Public Offering or acquired in open market transactions after the completion of the Public Offering, (b) the exercise of options to purchase shares of Common Stock granted under a stock incentive plan or stock purchase plan described in the Prospectus or the exercise of warrants to purchase shares of Common Stock described in the Prospectus and outstanding as of the date of the Prospectus, provided that the underlying Common Stock continues to be subject to the restrictions set forth above, (c) the exercise of options to purchase shares of Common Stock granted under a stock incentive plan or stock purchase plan described in the Prospectus pursuant to an arrangement whereby the Company withholds shares issuable pursuant to such option in payment of the exercise price, provided that no filing under Section 16(a) of the Exchange Act or other public announcement, reporting a reduction in beneficial ownership of shares of Common Stock, shall be required or shall be voluntarily made during the Restricted Period in connection with such option exercise, and provided further that the underlying Common Stock issued upon the exercise of such options continues to be subject to the restrictions set forth above, (d) transfers or dispositions of shares of Common Stock or any security convertible into or exercisable or exchangeable for shares of Common Stock to the Company pursuant to any contractual arrangement in effect on the date of this agreement that provides for the repurchase of the undersigned's Common Stock or such other securities by the Company or in connection with the termination of the undersigned's employment with the Company, (e) transfers or dispositions of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock as a bona fide gift, (f) transfers or dispositions of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock by will or other testamentary document or by intestacy, (g) distributions of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to limited partners, members, stockholders or trust beneficiaries of the undersigned or to any investment fund or other entity controlled or managed by the undersigned or (h) transfers or dispositions of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned in a transaction not involving a disposition for value; provided that (i) in the case of any transfer or distribution pursuant to clause (e), (f), (g) or (h), each donee, transferee or distributee shall sign and deliver a lock-up letter substantially in the form of this agreement and (ii) in the case of any transfer or distribution pursuant to clause (a), (e), (g) or (h), no filing under Section 16(a) of the Exchange Act or other public announcement, reporting a reduction in beneficial ownership of shares of Common Stock, shall be required or shall be voluntarily made during the Restricted Period in connection with such transfer or distribution, (i) the establishment of a new trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, provided that (i) such plan does not provide for the transfer of Common Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the undersigned or the Company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Common Stock may be made under such plan during the Restricted Period, (j) dispositions, or the withholding of shares of Common Stock, solely in connection with the payment of taxes due with respect to the vesting of restricted stock unit awards, insofar as such restricted stock units are outstanding as of the date of the Prospectus, provided that to the extent a public announcement or filing under the Exchange Act, if any, is required or voluntarily made by or on behalf of the undersigned or the Company regarding any such disposition or withholding, such announcement or filing shall include a statement to the effect that the transfer relates to the payment of taxes due with respect to the vesting of such restricted stock unit awards, or (k) transfers of shares of Common Stock by the undersigned pursuant to sales in the public market undertaken by the undersigned under a trading plan pursuant to Rule 10b5-1 under the Exchange Act, provided that such trading plan shall have been in effect prior to the date hereof, and provided, further, that to the extent a public announcement or filing under the Exchange Act, if any, is required or voluntarily made by or on behalf of the undersigned or the Company regarding any such sales, such announcement or filing shall include a statement to the effect that the sale was made pursuant to a trading plan pursuant to Rule 10b5-1 under the Exchange Act. For purposes hereof, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin. In addition, the undersigned agrees that, without the prior written consent of Morgan Stanley & Co. LLC and BofA Securities, Inc. on behalf of the Underwriters, it will not, during the Restricted Period, make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock. 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 shares of Common Stock except in compliance with the foregoing restrictions.

<u>A-2</u>

The undersigned understands that the Company and the Underwriters are relying upon this agreement in proceeding toward consummation of the Public Offering. The undersigned further understands that this agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors and assigns.

The undersigned acknowledges and agrees that the foregoing precludes the undersigned from engaging in any hedging or other transaction designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition of any shares of Common Stock, or any securities convertible into or exercisable or exchangeable for Common Stock, even if any such sale or disposition transaction or transactions would be made or executed by or on behalf of someone other than the undersigned.

The undersigned acknowledges and agrees that the Underwriters have not provided any recommendation or investment advice nor have the Underwriters solicited any action from the undersigned with respect to the Public Offering of the Shares, this Lock-Up Agreement or the subject matter thereof and the undersigned has consulted their own legal, accounting, financial, regulatory and tax advisors to the extent deemed appropriate. The undersigned further acknowledges and agrees that, although the Underwriters may provide certain Regulation Best Interest and Form CRS disclosures or other related documentation to you in connection with the Public Offering, the Underwriters are not making a recommendation to you to participate in the Public Offering, and nothing set forth in such disclosures or documentation is intended to suggest that any Underwriter is making such a recommendation.

A-3

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

The undersigned understands that, (i) if Morgan Stanley & Co. LLC and BofA Securities, Inc., on the one hand, or the Company, on the other hand, informs the other, prior to the execution of the Underwriting Agreement, that it has determined not to proceed with the Public Offering, (ii) 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 shares of Common Stock to be sold thereunder or (iii) if the Underwriting Agreement is not executed on or before December 16, 2022, the undersigned shall be automatically released from all obligations under this agreement.

This agreement and any claim, controversy or dispute arising under or related to this 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.

[Signature page follows]

A-4

Very truly yours,

(Name)

(Address)

Exhibit 5.1

WILMERHALE

+1 212 230 8800 (t) +1 212 230 8888 (f) wilmerhale.com

December 5, 2022

IVERIC bio, Inc. 8 Sylvan Way Parsippany, New Jersey 07054

Re: IVERIC bio., Inc. - Registration Statement on Form S-3

Ladies and Gentlemen:

This opinion is furnished to you in connection with (i) the Registration Statement on Form S-3 (File No. 333- 260406) (the "Registration Statement") filed by IVERIC bio, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of, among other things, shares of Common Stock, \$0.001 par value per share, of the Company (the "Common Stock"), which may be issued from time to time on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, at an indeterminate aggregate initial offering price, as set forth in the Registration Statement and the prospectus contained therein (the "Base Prospectus"), and (ii) the prospectus supplement, dated November 30, 2022 (the "Prospectus Supplement" and, together with the Base Prospectus, the "Prospectus"), relating to the issuance and sale by the Company pursuant to the Registration Statement of up to 15,352,500 shares of Common Stock (the "Shares"), including up to 2,002,500 shares of Common Stock issuable upon exercise of an option to purchase additional shares granted by the Company.

The Shares are to be issued and sold by the Company pursuant to an underwriting agreement, dated November 30, 2022 (the "Underwriting Agreement"), entered into by and among the Company and Morgan Stanley & Co. LLC, BofA Securities, Inc. and Cowen and Company, LLC, as representatives of the several underwriters named in the Underwriting Agreement, which is being filed as Exhibit 1.1 to the Company's Current Report on Form 8-K to be filed on the date hereof.

We are acting as counsel for the Company in connection with the issue and sale by the Company of the Shares. We have examined and relied upon signed copies of the Registration Statement as filed with the Commission. We have also examined and relied upon the Underwriting Agreement, the Prospectus, minutes of meetings and actions of the stockholders and the Board of Directors of the Company as provided to us by the Company, the Restated Certificate of Incorporation and Amended and Restated Bylaws of the Company, each as amended to date, and such other documents as we have deemed necessary for purposes of rendering the opinions hereinafter set forth.

Wilmer Cutler Pickering Hale and Dorr LLP, 7 World Trade Center, 250 Greenwich Street, New York, New York 10007 Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washingto IVERIC bio, Inc. December 5, 2022 Page 2

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such latter documents and the legal competence of all signatories to such documents.

We express no opinion herein as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Underwriting Agreement, the Shares will be validly issued, fully paid and nonassessable.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion with the Commission, in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act, as an exhibit to the Current Report on Form 8-K to be filed by the Company on the date hereof in connection with the issuance and sale of the Shares and to the use of our name therein and in the related Prospectus Supplement under the caption "Legal Matters." In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

IVERIC bio, Inc. December 5, 2022 Page 3

Very truly yours,

WILMER CUTLER PICKERING HALE AND DORR LLP

By: /s/ Wilmer Cutler Pickering Hale and Dorr LLP WILMER CUTLER PICKERING HALE AND DORR LLP

IVERIC BIO

Iveric Bio Announces Pricing of \$300 Million Public Offering of Common Stock

PARSIPPANY, N.J., November 30, 2022 – IVERIC bio, Inc. (Nasdaq: ISEE) (the "Company"), today announced the pricing of an upsized underwritten public offering of 13,350,000 shares of its common stock at a price to the public of \$22.50 per share, less underwriting discounts and commissions. In addition, in connection with the offering, the Company has granted the underwriters an option for a period of 30 days to purchase up to an additional 2,002,500 shares of its common stock at the public offering price, less underwriting discounts and commissions. All of the shares are being offered by the Company.

The gross proceeds from the offering are expected to be approximately \$300.4 million, before underwriting discounts and commissions and offering expenses payable by the Company, and without giving effect to any exercise by the underwriters of their option to purchase additional shares.

Morgan Stanley, BofA Securities, Cowen and Stifel are acting as the book-running managers for the offering. Wedbush PacGrow is acting as lead manager for the offering. The offering is expected to close on or about December 5, 2022, subject to customary closing conditions.

The offering is being made only by means of a prospectus supplement and accompanying prospectus that form a part of an automatically effective registration statement. A final prospectus supplement related to the offering will be filed with the Securities and Exchange Commission (the "SEC") and will be available on the SEC's website at www.sec.gov. Copies of the final prospectus supplement and the accompanying prospectus relating to the offering may also be obtained, when available, by contacting: Morgan Stanley, 180 Varick Street, 2nd Floor, New York, NY 10014, Attn: Prospectus Department, by telephone: 1-866-718-1649, or by email at prospectus@morganstanley.com; BofA Securities, 200 North College Street, 3rd floor, Charlotte, NC (28255-0001), Attn: Prospectus Department, by telephone: 1-800-294-1322, or by email at dg.prospectus_requests@bofa.com; Cowen and Company, LLC, c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717, by telephone: 1-833-297-2926, or by email at PostSaleManualRequests@broadridge.com; or Stifel, Nicolaus & Company, Incorporated, Attention: Prospectus Department, One Montgomery Street, Suite 3700, San Francisco, CA 94104, by telephone: 1-415-364-2720, or by email at syndprospectus@stifel.com.

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

About Iveric Bio

Iveric Bio is a science-driven biopharmaceutical company focused on the discovery and development of novel treatments for retinal diseases with significant unmet medical needs. The Company is committed to having a positive impact on patients' lives by delivering high-quality, safe and effective treatments designed to address debilitating retinal diseases including earlier stages of age-related macular degeneration.

Forward-Looking Statements

Any statements in this press release about the Company's future expectations, plans and prospects, including statements regarding the offering, constitute forward-looking statements for purposes of the safe harbor provisions under the Private Securities Litigation Reform Act of 1995. Forward-looking statements include any statements about the Company's strategy, future operations and future expectations and plans and prospects for the Company, and any other statements containing the words "anticipate," "believe," "estimate," "expect," "intend", "goal," "future", "may", "might," "plan," "predict," "project," "seek," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions. Such forward-looking statements involve substantial risks and uncertainties that could cause the Company's development programs, future results, performance or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the potential completion of the offering, satisfaction of customary closing conditions related to the offering, those related to the actual and expected effects of the COVID-19 pandemic, other macro-economic events and related response measures on the Company's business and operations, the timing, costs, conduct and outcome of the Company's ongoing and planned research and preclinical development activities and clinical trials, the Company's ability to establish and maintain capabilities and capacity for the manufacture of its product candidates, the Company's competitive position, the Company's expectations regarding the market dynamics for treatments for GA and other commercial matters, the Company's personnel and human capital resources, need for, and ability to obtain, additional financing, plans and ability to consummate business development transactions, whether the Company's cash resources will be sufficient to fund its foreseeable and unforeseeable operating expenses and capital requirements on its expected timelines, and other factors discussed in the "Risk Factors" section contained in the preliminary prospectus supplement and the reports that the Company files with the SEC. Any forward-looking statements represent the Company's views only as of the date of this press release. The Company anticipates that subsequent events and developments may cause its views to change. While the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so except as required by law.

Investor Contact: Iveric Bio Kathy Galante Senior Vice President, Investor Relations <u>kathy.galante@ivericbio.com</u>

or

Media Contact: Jeannie Neufeld Senior Director, Public Relations & Communications jeannie.neufeld@ivericbio.com