
**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): **March 27, 2024**

Xilio Therapeutics, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-40925
(Commission
File Number)

85-1623397
(IRS Employer
Identification No.)

828 Winter Street, Suite 300
Waltham, Massachusetts
(Address of Principal Executive Offices)

02451
(Zip Code)

Registrant's telephone number, including area code: **(857) 524-2466**

Not applicable
(Former Name or Former Address, if Changed Since Last Report)

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

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

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

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.0001 per share	XLO	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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01. Entry into a Material Definitive Agreement.

License Agreement

On March 27, 2024, Xilio Development, Inc. (“Xilio Development”), a wholly-owned subsidiary of Xilio Therapeutics, Inc. (the “Company”), entered into an exclusive license agreement (the “License Agreement”) with Gilead Sciences, Inc. (“Gilead”) and granted Gilead an exclusive global license to develop and commercialize the Company’s clinical-stage product candidate XTX301, a tumor-activated IL-12, and specified other molecules directed to IL-12.

Xilio Development will be responsible for conducting clinical development for XTX301 in the ongoing Phase 1 clinical trial through an initial planned Phase 2 dose expansion. Following the delivery by Xilio Development of a specified clinical data package for XTX301 related to the Phase 1 clinical trial and planned Phase 2 clinical trial, Gilead can elect to transition responsibilities for the development and commercialization of XTX301 to Gilead, subject to the terms of the Agreement and payment by Gilead of a \$75.0 million transition fee.

Under the License Agreement, the Company will receive approximately \$43.5 million in upfront payments, including a cash payment of \$30.0 million and an initial equity investment by Gilead of approximately \$13.5 million in the Company’s common stock, \$0.0001 par value per share (the “Common Stock”), at a purchase price of \$1.97 per share. The Company will be eligible to receive up to \$604.0 million in additional contingent payments, which include (i) the proceeds from up to three additional private placements of Common Stock, (ii) the \$75.0 million transition fee and (iii) specified development, regulatory and sales-based milestones. Prior to the potential transition fee, up to \$29.0 million of the total contingent payments are related to the potential additional private placements of Common Stock and a near-term development milestone. In addition, the Company is eligible to receive tiered royalties ranging from high single digits to mid-teens on annual global net product sales.

Unless earlier terminated in accordance with its terms, the License Agreement will expire upon expiration of the last royalty term for the last licensed product. Gilead may terminate the License Agreement for convenience upon specified time periods. If Gilead elects not to transition responsibilities for development and commercialization of the licensed products and pay the transition fee, then the License Agreement will automatically terminate. Either party may terminate the License Agreement for the other party’s uncured material breach or insolvency. Subject to the terms of the License Agreement, effective upon termination of the License Agreement, the licenses to Gilead terminate and Xilio Development is entitled to continue to exploit the licensed products.

During the term of the License Agreement, Xilio Development and its affiliates have agreed not to directly or indirectly conduct specified development, manufacturing or commercialization activities with respect to any molecule that contains, comprises or incorporates IL-12, except for the performance of Xilio Development’s activities under and in accordance with the License Agreement.

The foregoing description of the License Agreement is qualified in its entirety by reference to the complete text of the License Agreement, which the Company intends to file with the Securities and Exchange Commission as an exhibit to the Company’s Quarterly Report on Form 10-Q for the quarterly period ending March 31, 2024.

Stock Purchase Agreement and Investor Rights Agreement with Gilead

In connection with the execution of the License Agreement, on March 27, 2024, the Company entered into a stock purchase agreement with Gilead (the “Stock Purchase Agreement”) pursuant to which the Company agreed to initially issue and sell 6,860,223 of its shares of Common Stock to Gilead in a private placement at a purchase price of \$1.97 per share for an aggregate purchase price of approximately \$13.5 million (the “Initial Gilead Private Placement”).

The Initial Gilead Private Placement is anticipated to close on March 28, 2024, subject to customary closing conditions. The Stock Purchase Agreement contains other customary terms and conditions, including mutual representations, warranties and covenants for each of the Company and Gilead.

In addition, through March 27, 2025, the Company may, at its election and subject to the terms and conditions of the Stock Purchase Agreement, cause Gilead to purchase up to approximately \$11.5 million of additional shares of Common Stock (including, at Gilead’s sole election, prefunded warrants in lieu of shares of Common Stock) in up to three additional private placements (each, an “Additional Gilead Private Placement”) at a predetermined price per share

specified therein, at all times subject to Gilead not being deemed the beneficial owner of greater than 19.9% of the Company's Common Stock upon the closing of the applicable Additional Gilead Private Placement. If Gilead elects to purchase prefunded warrants, each prefunded warrant will have an exercise price of \$0.0001 per share of Common Stock, be immediately exercisable and remain exercisable until exercised in full. Gilead may not exercise its prefunded warrants to the extent that it would beneficially own more than 19.99% of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. Any prefunded warrants that may be issued to Gilead in an Additional Gilead Private Placement will be in substantially the same form as the Prefunded Warrants issued to the Investors (each as defined under "Securities Purchase Agreement with the Investors" below).

Pursuant to the terms of an investor rights agreement (the "Investor Rights Agreement") to be entered into between Gilead and the Company at the closing of the Initial Gilead Private Placement, Gilead will agree to certain transfer and standstill restrictions. In addition, Gilead will be entitled to certain registration rights with respect to the shares issued pursuant to the Stock Purchase Agreement following termination of the transfer restrictions. The Company and Gilead have each granted the other party customary indemnification rights in connection with the registration of the shares issued pursuant to the Stock Purchase Agreement.

The foregoing description of the Stock Purchase Agreement and the Investor Rights Agreement are qualified in their entirety by reference to the complete text of the Stock Purchase Agreement and the Investor Rights Agreement, which the Company intends to file with the Securities and Exchange Commission as exhibits to the Company's Quarterly Report on Form 10-Q for the quarterly period ending March 31, 2024. The foregoing description of the prefunded warrants is qualified in its entirety by reference to the complete text of the form of the prefunded warrant, a copy of which is attached hereto as Exhibit 4.1 and incorporated by reference into this Item 1.01.

Securities Purchase Agreement with the Investors

On March 28, 2024, the Company entered into a securities purchase agreement (the "Securities Purchase Agreement") with certain accredited investors (each an "Investor" and collectively, the "Investors"), pursuant to which the Company agreed to sell and issue to the Investors in a private placement (the "Private Placement") an aggregate of 1,953,125 shares (the "Investor Shares") of Common Stock at a purchase price of \$0.64 per share, and to certain Investors in lieu of shares of Common Stock, prefunded warrants (the "Prefunded Warrants") to purchase up to an aggregate of 15,627,441 shares of Common Stock (the "Warrant Shares" and together with the Investor Shares and the Prefunded Warrants, the "Securities"), at a purchase price of \$0.6399 per Prefunded Warrant.

The Private Placement is anticipated to close on April 2, 2024, subject to customary closing conditions. The Company anticipates receiving aggregate gross proceeds from the Private Placement of approximately \$11.3 million, before deducting placement agent fees and expenses payable by the Company. The Company expects to use the proceeds from the Private Placement to fund working capital and other general corporate purposes.

Each Prefunded Warrant will have an exercise price of \$0.0001 per share of Common Stock, be immediately exercisable and remain exercisable until exercised in full. The holders of Prefunded Warrants may not exercise such Prefunded Warrants to the extent that a holder, together such holder's affiliates and any other persons whose beneficial ownership of common stock would or could be aggregated with such holder's for purposes of Section 13(d) or Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), would beneficially own more than 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. The holders of Prefunded Warrants may increase or decrease such percentage, not to exceed 19.99%, by providing at least 61 days' prior notice to the Company.

The foregoing descriptions of the Securities Purchase Agreement and the Prefunded Warrants do not purport to be complete and are qualified in their entirety by reference to the complete text of the Securities Purchase Agreement and the form of the Prefunded Warrant, copies of which are attached hereto as Exhibits 10.1 and 4.1, respectively, and incorporated by reference into this Item 1.01.

Registration Rights Agreement with the Investors

In addition, on March 28, 2024, the Company entered into a registration rights agreement (the "Registration Rights Agreement") with the Investors, pursuant to which the Company agreed to register for resale the Investor Shares and the Warrant Shares (together, the "Registrable Securities"). Under the Registration Rights Agreement, the Company has

agreed to file a registration statement covering the resale by the Investors of their Registrable Securities no later than 30 days following the closing of the Private Placement. The Company has agreed to use commercially reasonable efforts to cause such registration statement to be declared effective as soon as practicable and to keep such registration statement effective until the earlier of (1) the date that all Registrable Securities covered by such registration statement have been sold or can be sold without restriction pursuant to Rule 144 (or any successor thereof) promulgated under the Securities Act of 1933, as amended (the “Securities Act”), and (2) five years after the closing of the Private Placement. The Company has agreed to be responsible for all fees and expenses incurred in connection with the registration of the Registrable Securities.

The Company has granted the Investors customary indemnification rights in connection with the registration statement. The Investors have also granted the Company customary indemnification rights in connection with the registration statement.

The foregoing description of the Registration Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the complete text of the Registration Rights Agreement, a copy of which is filed as Exhibit 10.2 hereto and incorporated by reference into this Item 1.01.

The representations, warranties and covenants contained in the Stock Purchase Agreement, the Investor Rights Agreement, the Securities Purchase Agreement and the Registration Rights Agreement were made solely for the benefit of the parties thereto and the placement agents expressly named as third-party beneficiaries thereto and may be subject to limitations agreed upon by the contracting parties. Accordingly, the Stock Purchase Agreement, the Investor Rights Agreement, the Securities Purchase Agreement and the Registration Rights Agreement are incorporated herein by reference only to provide investors with information regarding the terms thereof and not to provide investors with any other factual 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 Securities and Exchange Commission.

Item 2.02. Results of Operations and Financial Condition.

On March 28, 2024, the Company announced in a press release that the Company estimates that it had cash and cash equivalents of approximately \$44.7 million as of December 31, 2023.

The information contained in this Item 2.02 and in Item 8.01 below regarding the Company’s estimated cash balance as of December 31, 2023 is preliminary, unaudited, and is subject to the finalization of the Company’s full financial results for the fourth quarter and fiscal year ended December 31, 2023 and the completion of the Company’s financial statement closing procedures. This estimate also does not present all information necessary for an understanding of the Company’s financial condition as of December 31, 2023 and its results of operations for the fourth quarter and year ended December 31, 2023. Accordingly, undue reliance should not be placed on this preliminary estimate.

The information in this Item 2.02 is being furnished and shall not be deemed “filed” for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 2.05. Costs Associated with Exit or Disposal Activities.

On March 27, 2024, the board of directors of the Company approved a strategic portfolio reprioritization and restructuring. As part of the strategic portfolio reprioritization and restructuring, the Company plans to:

- focus on rapidly advancing clinical development for XTX301 and XTX101, a tumor-activated, Fc-enhanced anti-CTLA-4, and leveraging the Company’s promising research platform to advance differentiated bispecific and cell-engager molecules;
 - discontinue further investment in XTX202 as a monotherapy and explore strategic opportunities to continue to develop XTX202 in combination with other agents; and
 - undertake efforts to further reduce its expenses and streamline its operations, including a reduction in headcount of 15 employees, representing approximately 21% of the Company’s current workforce.
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In connection with the workforce reduction, the Company expects to incur one-time costs of approximately \$1.0 million, primarily related to cash expenditures for severance and benefits continuation. The Company estimates that the workforce reduction will be substantially completed in the first half of 2024. The estimate of costs that the Company expects to incur and the timing thereof are subject to a number of assumptions, and actual results may differ. The Company may also incur additional costs not currently contemplated due to events that may occur as a result of, or that are associated with, the actions described above.

Item 3.02. Unregistered Sales of Equity Securities.

Sale of Shares to Gilead

The description of the issuance and sale of the shares of Common Stock pursuant to the Stock Purchase Agreement set forth under Item 1.01 above under the caption “Stock Purchase Agreement with Gilead” is incorporated by reference into this Item 3.02. The issuance and sale has not been registered under the Securities Act or any state securities laws. Based in part upon the representations of Gilead in the Stock Purchase Agreement, the Company has relied on the exemption from the registration requirements of the Securities Act under Section 4(a)(2) thereof for a transaction by an issuer not involving any public offering.

Sale of Shares to the Investors

The description of the issuance and sale of shares of Common Stock (including shares of Common Stock underlying the Prefunded Warrants) pursuant to the Securities Purchase Agreement set forth under Item 1.01 above under the caption “Securities Purchase Agreement with the Investors” is incorporated by reference into this Item 3.02. The issuance and sale has not been registered under the Securities Act or any state securities laws. Based in part upon the representations of the Investors in the Securities Purchase Agreement, the Company has relied on the exemption from the registration requirements of the Securities Act under Section 4(a)(2) thereof for a transaction by an issuer not involving any public offering.

Neither this Current Report on Form 8-K (this “Form 8-K”) nor any exhibit attached hereto is an offer to sell or a solicitation of an offer to purchase the Securities or other securities of the Company.

Item 7.01. Regulation FD Disclosure.

On March 28, 2024, the Company issued a press release regarding the transactions contemplated by the License Agreement and the Stock Purchase Agreement. In addition, on March 28, 2024, the Company issued a press release regarding the transactions contemplated by the Private Placement, the additional data from the Company’s Phase 2 clinical trial evaluating XTX202 in renal cell carcinoma and melanoma patients with advanced solid tumors, and its plans to reprioritize its resources, including the workforce reduction and plans to discontinue further investment in XTX202 as a monotherapy. Copies of the press releases are furnished as Exhibits 99.1 and 99.2 to this Form 8-K.

The information in Item 7.01 of this Form 8-K, including Exhibits 99.1 and 99.2 attached hereto, is intended to be furnished and shall not be deemed “filed” for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 8.01. Other Events.

In the first quarter of 2024, the Company repaid all amounts outstanding under the loan and security agreement (as amended, the “Loan Agreement”) with Pacific Western Bank (“PacWest”), and PacWest released all security interests in the Company’s and its affiliates’ assets.

The Company estimates that, as of December 31, 2023, its cash and cash equivalents were \$44.7 million. Based on its current operating plans, the Company anticipates that its cash and cash equivalents as of December 31, 2023, together with the upfront payment under the License Agreement, the proceeds from the Initial Gilead Private Placement, the anticipated net proceeds from the Private Placement and after giving effect to one-time costs and anticipated future cost savings associated with the strategic portfolio reprioritization and workforce reduction and the repayment of the

outstanding loan balance under the Loan Agreement in the first quarter of 2024, will be sufficient to fund its operating expenses and capital expenditure requirements into the second quarter of 2025.

Cautionary Note Regarding Forward Looking Statements

This Form 8-K contains forward-looking statements that involve estimates, assumptions, risks and uncertainties. Forward-looking statements include, but are not limited to, statements related to the amount of proceeds expected from the Stock Purchase Agreement and Initial Gilead Private Placement and the Securities Purchase Agreement and Private Placement, the timing and certainty of completion of the Initial Gilead Private Placement and the Private Placement and the transactions contemplated by the Securities Purchase Agreement and the Stock Purchase Agreement, and in each case, the filing of a registration statement to register the resale of the registrable securities being sold in connection therewith, the timing of and costs associated with the strategic portfolio reprioritization, the potential benefits of any of the Company's current or future product candidates in treating patients as a monotherapy or combination therapy, the potential for the Company to leverage its research platform to develop bispecific or cell engager molecules, the Company's anticipated cash and cash equivalents as of December 31, 2023 and the period in which the Company expects to have cash to fund its operations, and the Company's strategy, goals and anticipated financial performance, milestones, business plans and focus. The risks and uncertainties relating to the Company and the transactions include general market conditions, whether the conditions for the closing of the Gilead Private Placement and the Private Placement will be satisfied, and other risks detailed from time to time in the Company's filings with the SEC, including in its Annual Report on Form 10-K for the year ended December 31, 2022 and in its Quarterly Report on Form 10-Q for the quarter ended September 30, 2023. Any forward-looking statements contained in this Form 8-K represent the Company's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. Except as required by law, the Company explicitly disclaims any obligation to update any forward-looking statements.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
4.1	Form of Prefunded Warrant
10.1	Securities Purchase Agreement, dated March 28, 2024, among Xilio Therapeutics, Inc. and the persons party thereto
10.2	Registration Rights Agreement, dated March 28, 2024, among Xilio Therapeutics, Inc. and the persons party thereto
99.1	Press release issued by Xilio Therapeutics, Inc. on March 28, 2024
99.2	Press release issued by Xilio Therapeutics, Inc. on March 28, 2024
104	Cover Page Interactive Data File (embedded within the Inline XBRL document and incorporated as Exhibit 101)

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.

XILIO THERAPEUTICS, INC.

Date: March 28, 2024

By: /s/ Chris Frankenfield
Chris Frankenfield
Chief Operating Officer

THESE SECURITIES REPRESENTED HEREBY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THESE SECURITIES HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE BUT HAVE BEEN OR WILL BE ISSUED IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND, ACCORDINGLY, MAY NOT BE TRANSFERRED UNLESS (I) SUCH SECURITIES HAVE BEEN REGISTERED FOR SALE PURSUANT TO THE SECURITIES ACT OF 1933, AS AMENDED, (II) SUCH SECURITIES MAY BE SOLD PURSUANT TO RULE 144, (III) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSFER MAY LAWFULLY BE MADE WITHOUT REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (IV) THE SECURITIES ARE TRANSFERRED WITHOUT CONSIDERATION TO AN AFFILIATE OF SUCH HOLDER OR A CUSTODIAL NOMINEE (WHICH FOR THE AVOIDANCE OF DOUBT SHALL REQUIRE NEITHER CONSENT NOR THE DELIVERY OF AN OPINION).

XILIO THERAPEUTICS, INC.

FORM OF PRE-FUNDED WARRANT TO PURCHASE COMMON STOCK

Warrant No. _____

Number of Shares: _____
(subject to adjustment)

Original Issue Date: March _____, 2024

Xilio Therapeutics, Inc., a Delaware corporation (the "Company"), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, _____ or its permitted assigns (the "Holder"), is entitled, subject to the terms set forth below, to purchase from the Company up to a total of _____ shares of common stock, \$0.0001 par value per share (the "Common Stock"), of the Company (each such share, a "Warrant Share" and all such shares, the "Warrant Shares") at an exercise price per share equal to \$0.0001 per share (as adjusted from time to time as provided in Section 9 herein, the "Exercise Price"), upon surrender of this Pre-Funded Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the "Warrant") at any time and from time to time on or after the date hereof (the "Original Issue Date"), and subject to the following terms and conditions:

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

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

(b) "Attribution Parties" means, collectively, the following Persons and entities: (i) any direct or indirect Affiliates of the Holder, (ii) any Person acting or who reasonably could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iii) any other Persons whose beneficial ownership of the Company's Common Stock reasonably could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) or Section 16 of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(c) "Closing Sale Price" means, for any security as of any date, the last trade price for such security on the Principal Trading Market for such security, as reported by Bloomberg Financial Markets, or, if such Principal Trading Market begins to operate on an extended hours basis and does not designate the last trade price, then the last trade price of such security prior to 4:00 P.M., New York City time, as reported by Bloomberg Financial Markets, or if the foregoing do not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg Financial Markets, or, if no last trade price is reported for such security by Bloomberg Financial Markets, the average of the bid and ask prices of any market makers for such security as reported in the OTC Link or "pink sheets" by OTC Markets Group Inc. (formerly OTC Markets Inc.) as of 4:00 P.M., New York City time on such date. If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair

market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then the Board of Directors of the Company shall use its good faith judgment to determine the fair market value. The determination of the Board of Directors of the Company shall be binding upon all parties absent demonstrable error. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

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

(e) “Group” shall have the meaning ascribed to it in Section 13(d) of the Exchange Act, and all related rules, regulations and jurisprudence.

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

(g) “Principal Trading Market” means the national securities exchange or other trading market on which the Common Stock is primarily listed on and quoted for trading, which, as of the Original Issue Date shall be the Nasdaq Global Select Market.

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

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

(j) “Standard Settlement Period” means the standard settlement period, expressed in a number of Trading Days, for the Company’s primary trading market or quotation system with respect to the Common Stock that is in effect on the date of delivery of an applicable Exercise Notice, which as of the Original Issue Date was “T+2”.

(k) “Trading Day” means any weekday on which the Principal Trading Market is normally open for trading.

(l) “Transfer Agent” means Computershare Trust Company, N.A., the Company’s transfer agent and registrar for the Common Stock, and any successor appointed in such capacity, or if none, the Company.

2. Registration of Warrants. The Company shall register ownership of this Warrant, upon records to be maintained by the Company for that purpose (the “Warrant Register”), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any assignee to which this Warrant is permissibly assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner and holder hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. Registration of Transfers. Subject to compliance with all applicable securities laws, the Company shall, or will cause its Transfer Agent to, register the transfer of all or any portion of this Warrant in the Warrant Register upon surrender of this Warrant and payment for all applicable transfer taxes (if any) by the Holder or any subsequent holder. Upon any such registration or transfer, a new warrant to purchase Common Stock in substantially the form of this Warrant (any such new warrant, a “New Warrant”) evidencing the portion of this Warrant so transferred shall be issued to the transferee, and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant. The Company shall, or will cause its Transfer Agent to, prepare, issue and deliver at the Company’s own expense any New Warrant under this Section 3. Until due presentment for registration of transfer, the Company may deem and treat the registered Holder hereof as the owner and holder for all purposes, and the Company shall not be affected by any notice to the contrary.

4. Exercise and Duration of Warrants.

(a) All or any part of this Warrant shall be exercisable by the registered Holder in the manner set forth herein (including in Section 10) at any time and from time to time on or after the Original Issue Date.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the "Exercise Notice"), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which may take the form of a "cashless exercise" if so indicated in the Exercise Notice pursuant to Section 10 below), and the date on which the last of such items is delivered to the Company (as determined in accordance with the notice provisions hereof) is an "Exercise Date." The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to purchase the remaining number of Warrant Shares, if any. The aggregate exercise price of this Warrant, except for the Exercise Price, was pre-funded to the Company on or before the Original Issue Date, and consequently no additional consideration (other than the Exercise Price) shall be required to be paid by the Holder to effect any exercise of this Warrant. The Holder shall not be entitled to the return or refund of all, or any portion, of such pre-funded exercise price under any circumstance or for any reason whatsoever. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.

5. Delivery of Warrant Shares.

(a) Upon exercise of this Warrant in accordance with the terms of this Warrant (including Section 10), the Company shall promptly (but in no event later than the number of Trading Days comprising the Standard Settlement Period following the Exercise Date), upon the request of the Holder, credit or instruct the Transfer Agent to credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with The Depository Trust Company ("DTC") through its Deposit Withdrawal At Custodian system, provided that the Transfer Agent is then a participant in the DTC Fast Automated Securities Transfer ("FAST") Program and either (i) there is an effective registration statement permitting the issuance of such Warrant Shares to or resale of such Warrant Shares by the Holder or (ii) such Warrant Shares are eligible for resale under Rule 144(b)(1) promulgated under the Securities Act, and otherwise issue such Warrant Shares in the name of the Holder or its designee in restricted book-entry form in the Company's share register. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. The Holder, or any natural person or legal entity (each, a "Person") permissibly so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date, irrespective of the date such Warrant Shares are credited to the Holder's or its designee's DTC account or the date of the book-entry positions evidencing such Warrant Shares, as the case may be. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if issued in restricted book-entry form, will contain a customary legend to the effect that the Warrant Shares are not registered.

(b) If within the Standard Settlement Period after the Exercise Date, the Company fails to deliver to the Holder or its designee the required number of Warrant Shares in the manner required pursuant to Section 5(a) or fails to credit the Holder's or its designee's balance account with DTC for such number of Warrant Shares to which the Holder is entitled, and if after such number of Trading Days comprising the Standard Settlement Period and prior to the receipt of such Warrant Shares, the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall, within two (2) Trading Days after the Holder's request promptly honor its obligation to deliver to the Holder or its designee such Warrant Shares and pay cash to the Holder in an amount equal to the excess (if any) of Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased in the Buy-In *less* the product of (i) the number of shares of Common Stock purchased in the Buy-In, times (ii) the Closing Sale Price of a share of Common Stock on the Exercise Date.

(c) To the extent permitted by law and subject to Section 5(b), the Company's obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof (including the limitations set forth in Section 11 below) are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Subject to Section 5(b), nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

6. Charges, Taxes and Expenses. Issuance and delivery of shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, transfer agent fee or other incidental tax or expense (excluding any applicable stamp duties) in respect of the issuance of such shares, all of which taxes and expenses shall be paid by the Company; provided, however, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the registration of any Warrant Shares or the Warrants in a name other than that of the Holder or an Affiliate thereof. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

7. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable indemnity and surety bond, if requested by the Company. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

8. Reservation of Warrant Shares. The Company covenants that it will, at all times while this Warrant is outstanding, reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are issuable and deliverable upon the exercise of this entire Warrant (the "Number of Warrant Shares"), free from preemptive rights or any other contingent purchase rights of Persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The failure of the Company to reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock a sufficient number of shares of Common Stock to enable it to issue Warrant Shares upon exercise of this Warrant as herein provided is referred to herein as an "Authorized Share Failure." The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and non-assessable. The Company will take all such action as may be reasonably necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed. The Company further covenants that it will not, without the prior written consent of the Holder, take any actions to increase the par value of the Common Stock at any time while this Warrant is outstanding. In furtherance of the Company's obligations set forth in this Section 8, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than ninety (90) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its reasonable best efforts to solicit its stockholders' approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding shares of Common Stock to

approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C.

9. Certain Adjustments. The Exercise Price and the Number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9.

(a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock issued and outstanding on the Original Issue Date and in accordance with the terms of such stock on the Original Issue Date or as amended, that is payable in shares of Common Stock, (ii) subdivides its outstanding shares of Common Stock into a larger number of shares of Common Stock, (iii) combines its outstanding shares of Common Stock into a smaller number of shares of Common Stock or (iv) issues by reclassification of shares of capital stock any additional shares of Common Stock of the Company, then in each such case the Number of Warrant Shares shall be multiplied by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately after such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately before such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, provided, however, that if such record date shall have been fixed and such dividend is not fully paid on the date fixed therefor, the Number of Warrant Shares shall be recomputed accordingly as of the close of business on such record date and thereafter the Number of Warrant Shares shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends. Any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.

(b) Pro Rata Distributions. If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph), (iii) rights or warrants to subscribe for or purchase any security (including Common Stock), or (iv) cash or any other asset (in each case, a “Distribution”), other than a reclassification as to which Section 9(c) applies, then in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage (as defined below)) immediately before the date on which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, that to the extent that the Holder’s right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times as (all or a portion) its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted (all or such portion of) such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

(c) Fundamental Transactions. If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, in which the Company is not the surviving entity or the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) the Company effects any sale to another Person of all or substantially all of its assets in one transaction or a series of related transactions, (iii) pursuant to any tender offer or exchange offer (whether by the Company or another Person), holders of capital stock tender shares representing more than 50% of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, (iv) the Company consummates a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the voting power of the capital stock of the Company (except for any such transaction in which the stockholders of the Company immediately prior to such transaction maintain, in substantially the same proportions, the voting power of such Person immediately after the transaction)

or (v) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 9(a) above) (in any such case, a “Fundamental Transaction”), then following such Fundamental Transaction the Holder shall have the right to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the Number of Warrant Shares without regard to any limitations on exercise contained herein (in the case of clause (iii) above, assuming it had tendered, and the offeror had accepted, such Warrant Shares) (the “Alternate Consideration”). The Company shall not effect any Fundamental Transaction in which the Company is not the surviving entity or the Alternate Consideration includes securities of another Person unless (i) the Alternate Consideration is solely cash and the Company provides for the simultaneous “cashless exercise” of this Warrant pursuant to Section 10 below or (ii) prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant. The provisions of this paragraph (d) shall similarly apply to subsequent transactions analogous of a Fundamental Transaction type.

(d) Exercise Price. Simultaneously with any adjustment to the Number of Warrant Shares pursuant to Section 9, the Exercise Price shall be increased or decreased proportionately, so that after such adjustment, the aggregate Exercise Price payable hereunder for the increased or decreased Number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment. Notwithstanding the foregoing, in no event may the Exercise Price be adjusted below the par value of the Common Stock then in effect.

(e) Calculations. All calculations under this Section 9 shall be made to the nearest one-hundredth of one cent or the nearest whole share, as applicable.

(f) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 9, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Transfer Agent.

(g) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such transaction at least ten (10) days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice. In addition, if while this Warrant is outstanding, the Company authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction contemplated by Section 9(c), other than a Fundamental Transaction under clause (iii) of Section 9(c), then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such Fundamental Transaction at least ten (10) days prior to the date such Fundamental Transaction is consummated.

10. Payment of Exercise Price. Notwithstanding anything contained herein to the contrary, the Holder may, in its sole discretion, exercise this Warrant, whether in whole or in part, and in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Exercise Price, through a

“cashless exercise.” Upon such cashless exercise, the Company shall issue to the Holder the number of Warrant Shares in an exchange of securities effected pursuant to Section 3(a)(9) of the Securities Act, determined as follows:

$$X = Y [(A-B)/A]$$

where:

“X” equals the number of Warrant Shares to be issued to the Holder;

“Y” equals the total number of Warrant Shares with respect to which this Warrant is then being exercised;

“A” equals the Closing Sale Price per share of Common Stock (as reported by Bloomberg Financial Markets) as of the Trading Day on the date immediately preceding the Exercise Date; and

“B” equals the Exercise Price per Warrant Share then in effect on the Exercise Date.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in such a “cashless exercise” transaction shall be deemed to have been acquired by the Holder, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued (provided that the SEC continues to take the position that such treatment is proper at the time of such exercise).

In the event that a registration statement registering the issuance of the Warrant Shares is, for any reason, not effective at the time of exercise of this Warrant, then the Warrant may only be exercised through a cashless exercise, as set forth in this [Section 10](#). Except as set forth in [Section 5\(b\)](#) (Buy-In remedy) and [Section 12](#) (payment of cash in lieu of fractional shares), in no event will the exercise of this Warrant be settled in cash.

11. Limitations on Exercise.

(a) The Holder shall be prohibited from exercising this Warrant if, immediately prior to or following such exercise (or portion of such exercise thereof), the Holder, together with its Attribution Parties, collectively beneficially owns or would beneficially own as determined in accordance with Section 13(d) of the Exchange Act more than 9.99% (the “Maximum Percentage”) of the issued and outstanding Common Stock or any other class of equity security (other than an exempted security) of the Company that is registered pursuant to Section 12 of the Exchange Act immediately after giving effect to such exercise. For purposes of calculating beneficial ownership, the aggregate number of shares of Common Stock beneficially owned by the Holder, together with its Attribution Parties, shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder, together with its Attribution Parties, and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company beneficially owned by the Holder, together with its Attribution Parties (including, without limitation, any convertible notes, convertible stock or warrants) that are subject to a limitation on conversion or exercise analogous to the limitation contained herein. For purposes of this [Section 11\(a\)](#), beneficial ownership shall be calculated and determined in accordance with Section 13(d) of the Exchange Act and the rules promulgated thereunder, it being acknowledged and agreed that the Holder is solely responsible for any schedules required to be filed in accordance therewith. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (1) the Company’s most recent Form 10-K, Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (2) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the “Reported Outstanding Share Number”). If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent

that such Exercise Notice would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 11(a), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the "Reduction Shares") and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written request of the Holder, the Company shall within one (1) Trading Day confirm to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "Excess Shares") shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. By written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage (not in excess of 19.99% if exceeding that limit would result in a change of control under Nasdaq Listing Rule 5635(b) or any successor rule) specified in such notice; provided that (i) any increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company, (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Warrants that is not an Attribution Party of the Holder, and (iii) no such decrease shall affect the validity of any prior exercise of Warrants by Holder or any Attribution Party. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) of the Exchange Act or Rule 16a-1(a)(1) promulgated under the Exchange Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 11(a) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 11(a) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

(b) This Section 11 shall not restrict the number of shares of Common Stock which a Holder may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder may receive in the event of a Fundamental Transaction as contemplated in Section 9(c) of this Warrant.

12. No Fractional Shares. No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the number of Warrant Shares to be issued shall be rounded down to the next whole number and the Company shall pay the Holder in cash the fair market value (based on the Closing Sale Price) for any such fractional shares.

13. Notices. Whenever notice is required to be given under this Warrant, including, without limitation, an Exercise Notice, unless otherwise provided herein, such notice shall be given in writing, (i) if delivered (a) from within the domestic United States, by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, electronic mail or by facsimile or (b) from outside the United States, by internationally recognized overnight express courier, electronic mail or facsimile, and (ii) will be deemed given (A) if delivered by first-class registered or certified mail domestic, three (3) Trading Days after so mailed, (B) if delivered by nationally recognized overnight carrier, one (1) Trading Day after so mailed, (C) if delivered by internationally recognized overnight express courier, two (2) Trading Days after so mailed and (D) at the time of transmission, if delivered by electronic mail to the email address specified in this Section 13 prior to 5:00 p.m. (New York time) on a Trading Day, (E) the next Trading Day after the date of transmission, if delivered by electronic mail to the email address specified in this Section 13 on a day that is not a Trading Day or later than 5:00 p.m. (New

York time) on any Trading Day and (F) if delivered by facsimile, upon electronic confirmation of delivery of such facsimile, and will be delivered and addressed as follows:

(i) If to the Company, to:

Xilio Therapeutics, Inc.
828 Winter Street, Suite 300
Waltham, MA 02451
Attention: [·]
Email: [·]
with a copy (which shall not constitute notice) to:

Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street Boston, MA 02109
Attention: Cynthia T. Mazareas
Email: cynthia.mazareas@wilmerhale.com

(ii) if to the Holder, at such address or other contact information delivered by the Holder to Company or as is on the books and records of the Company.

14. Warrant Agent. The Company shall initially serve as warrant agent under this Warrant. Upon thirty (30) days' notice to the Holder, the Company may appoint a new warrant agent. Any entity into which the Company or any new warrant agent may be merged or any entity resulting from any consolidation to which the Company or any new warrant agent shall be a party or any entity to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

15. Miscellaneous.

(a) No Rights as a Stockholder. Except as otherwise set forth in this Warrant, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

(b) Authorized Shares. Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate or articles of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (a) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (b) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable Warrant Shares upon the exercise of this Warrant, and (c) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.

(c) Successors and Assigns. Subject to compliance with applicable securities laws, this Warrant may be transferred or assigned by the Holder. This Warrant may not be assigned by the Company without the written consent of the Holder except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding on and inure to the benefit of the Company and the Holder and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant. This Warrant may be amended only in writing signed by the Company and the Holder, or their successors and assigns.

(d) Amendment and Waiver. Except as otherwise provided herein, this Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

(e) Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

(f) Governing Law; Jurisdiction. ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF DELAWARE WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW THEREOF. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE STATE OF DELAWARE FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HERewith OR WITH ANY TRANSACTION CONTEMPLATED HEREBY OR DISCUSSED HEREIN (INCLUDING WITH RESPECT TO THE ENFORCEMENT OF ANY OF THE TRANSACTION DOCUMENTS), AND HEREBY IRREVOCABLY WAIVES, AND AGREES NOT TO ASSERT IN ANY SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH SUIT, ACTION OR PROCEEDING BY MAILING A COPY THEREOF VIA REGISTERED OR CERTIFIED MAIL OR OVERNIGHT DELIVERY (WITH EVIDENCE OF DELIVERY) TO SUCH PERSON AT THE ADDRESS IN EFFECT FOR NOTICES TO IT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW. EACH OF THE COMPANY AND THE HOLDER HEREBY WAIVES ALL RIGHTS TO A TRIAL BY JURY.

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

(h) Severability. In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby, and the Company and the Holder will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

XILIO THERAPEUTICS, INC.

By: _____
Name:
Title:

SCHEDULE 1

FORM OF EXERCISE NOTICE

[To be executed by the Holder to purchase shares of Common Stock under the Warrant]

XILIO THERAPEUTICS, INC.

Ladies and Gentlemen:

- (1) The undersigned is the Holder of Pre-Funded Warrant to Purchase Common Stock No. ____ (the "Warrant") issued by Xilio Therapeutics, Inc., a Delaware corporation (the "Company"). Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.
- (2) The undersigned hereby exercises its right to purchase Warrant Shares pursuant to the Warrant.
- (3) Payment of the Exercise Price shall take the form of (check applicable box):
- Cash Exercise in lawful money of the United States (wire transfer or cashier's check drawn on a United States bank); or
- a "Cashless Exercise" under Section 10 of the Warrant.
- (4) Pursuant to this Exercise Notice, the Company shall deliver to the Holder the applicable number of Warrant Shares determined in accordance with the terms of the Warrant. The Warrant Shares shall be delivered to the following DWAC Account number:
- (5) By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 11(a) of the Warrant to which this notice relates.

Dated: _____

Name of Holder: _____

By: _____

Name: _____

Title: _____

(Signature must conform in all respects to name of Holder as specified on the face of the Warrant)

SECURITIES PURCHASE AGREEMENT

This SECURITIES PURCHASE AGREEMENT (this “**Agreement**”) is made and entered into as of March 28, 2024 (the “**Execution Date**”) by and among Xilio Therapeutics, Inc., a Delaware corporation (the “**Company**”), and the Investors identified on **Exhibit A** attached hereto (each an “**Investor**” and collectively the “**Investors**”).

RECITALS

- A. The Company and the Investors are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by the provisions of Section 4(a)(2) of the 1933 Act (as defined below);
- B. The Investors wish to purchase from the Company, and the Company wishes to sell and issue to the Investors, upon the terms and subject to the conditions stated in this Agreement, an aggregate of 1,953,125 shares (the “**Shares**”) of the Company’s Common Stock, par value \$0.0001 per share (the “**Common Stock**”) and pre-funded warrants to purchase up to an aggregate of 15,627,441 shares Common Stock in the form attached hereto as **Exhibit B** (the “**Pre-Funded Warrants**”); and
- C. Contemporaneously with the sale of the Placement Securities (as defined below), the parties hereto will execute and deliver a Registration Rights Agreement, in the form attached hereto as **Exhibit C** (the “**Registration Rights Agreement**”), pursuant to which the Company will agree to provide certain registration rights in respect of the Shares and the Warrant Shares (as defined below) under the 1933 Act and applicable state securities laws.

In consideration of the mutual promises made herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. **Definitions.** For the purposes of this Agreement, the following terms shall have the meanings set forth below:

“**Affiliate**” means, with respect to any Person, any other Person which directly or indirectly through one or more intermediaries Controls, is controlled by, or is under common Control with such Person. For the avoidance of doubt, with respect to any Investor that is an investment fund or other investment vehicle, such Investor shall be deemed not to be an Affiliate of (i) any portfolio company of such Investor or its Affiliates or (ii) any limited partner of any such Investor or its Affiliates.

“**Anti-Money Laundering Laws**” has the meaning set forth in Section 4.5.

“**Breach**” has the meaning set forth in Section 4.33.

“**Business Day**” means a day, other than a Saturday or Sunday, on which banks in New York City are open for the general transaction of business.

“**Bylaws**” means the Company’s Second Amended and Restated By-Laws.

“**Certificate of Incorporation**” means the Company’s Restated Certificate of Incorporation.

“**Closing**” has the meaning set forth in Section 3.1.

“**Closing Date**” has the meaning set forth in Section 3.1.

“**Common Stock**” has the meaning set forth in the recitals to this Agreement.

“**Common Stock Purchase Agreement**” means that certain Common Stock Purchase Agreement, dated as of March 28, 2024, by and between the Company and Gilead Sciences, Inc.

“**Company Covered Person**” means, with respect to the Company as an “issuer” for purposes of Rule 506 promulgated under the 1933 Act, any Person listed in the first paragraph of Rule 506(d)(1).

“**Company’s Knowledge**” means the actual knowledge of the executive officers (as defined in Rule 405 under the 1933 Act) of the Company.

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

“**Company X Transactions**” means the transactions contemplated by the License Agreement, the Investor Rights Agreement and the Common Stock Purchase Agreement.

“**Data**” has the meaning set forth in [Section 4.33](#).

“**Data Security Obligations**” has the meaning set forth in [Section 4.33](#).

“**EDGAR system**” has the meaning set forth in [Section 4.9](#).

“**Environmental Laws**” has the meaning set forth in [Section 4.15](#).

“**Execution Date**” has the meaning set forth in the recitals to this Agreement.

“**FDA**” has the meaning set forth in [Section 4.30](#).

“**GAAP**” has the meaning set forth in [Section 4.17](#).

“**Governmental Entity**” means any national, federal, state, municipal, local, territorial, foreign or other government or any department, commission, board, bureau, agency, regulatory or instrumentality thereof, or any court, judicial, administrative or arbitral body or public or private tribunal.

“**Health Care Laws**” has the meaning set forth in [Section 4.30](#).

“**HIPAA**” has the meaning set forth in [Section 4.30](#).

“**HSR Act**” has the meaning set forth in [Section 7.9](#).

“**Intellectual Property Rights**” has the meaning set forth in [Section 4.14](#).

“**Investor Questionnaire**” has the meaning set forth in [Section 5.9](#).

“**Investor Rights Agreement**” means that certain Investor Rights Agreement, dated as of March 28, 2024, by and between the Company and Gilead Sciences, Inc.

“**License Agreement**” means that certain License Agreement, dated as of March 27, 2024, by and between the Company and Gilead Sciences, Inc.

“**Lock-Up Agreement**” means the Lock-Up Agreement, dated as of the date hereof, executed by each of the Company’s directors and executive officers, in the form of **Exhibit E** attached hereto.

“**Material Adverse Effect**” means a material adverse effect on (a) the assets, liabilities, results of operations, financial condition or business of the Company and its subsidiaries taken as a whole, (b) the legality or enforceability of any of the Transaction Documents or (c) the ability of the Company to perform its obligations under the Transaction Documents, except that for purposes of [Section 6.1\(f\)](#) of this Agreement, in no event shall a change in the market price of the Common Stock alone constitute a “Material Adverse Effect”.

“**Material Contract**” means any contract, instrument or other agreement to which the Company is a party or by which it is bound that has been filed or was required to have been filed as an exhibit to the SEC Filings pursuant to Item 601(b)(4) or Item 601(b)(10) of Regulation S-K.

“**Nasdaq**” means the Nasdaq Global Select Market.

“**Person**” means an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, sole proprietorship, unincorporated organization, governmental authority or any other form of entity not specifically listed herein.

“**Placement Agent**” means Morgan Stanley & Co. LLC.

“**Placement Securities**” means the Shares and the Pre-Funded Warrants.

“**Pre-Funded Warrants**” has the meaning set forth in the recitals to this Agreement.

“**Press Release**” has the meaning set forth in Section 9.7.

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

“**Registration Rights Agreement**” has the meaning set forth in the recitals to this Agreement.

“**Regulation D**” means Regulation D as promulgated by the SEC under the 1933 Act.

“**Regulatory Authorities**” has the meaning set forth in Section 4.30.

“**Required Investors**” has the meaning set forth in the Registration Rights Agreement.

“**Sanctions**” has the meaning set forth in Section 4.26.

“**Sanctioned Country**” has the meaning set forth in Section 4.25.

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

“**SEC Filings**” has the meaning set forth in Section 4.8.

“**Securities**” means the Shares, the Pre-Funded Warrants and the Warrant Shares.

“**Shares**” has the meaning set forth in the recitals to this Agreement.

“**Short Sales**” means all “short sales” as defined in Rule 200 of Regulation SHO under the 1934 Act (but shall not be deemed to include the location and/or reservation of borrowable shares of Common Stock).

“**Trading Day**” means (a) a day on which the Common Stock is listed or quoted and traded on its Principal Trading Market (other than the OTC Bulletin Board), or (b) if the Common Stock is not listed on a Trading Market (other than the OTC Bulletin Board), a day on which the Common Stock is traded in the over-the-counter market, as reported by the OTC Bulletin Board, or (c) if the Common Stock is not quoted on any Trading Market, a day on which the Common Stock is quoted in the over-the-counter market as reported in the “pink sheets” by OTC Markets Group Inc. (or any similar organization or agency succeeding to its functions of reporting prices); provided, that in the event that the Common Stock is not listed or quoted as set forth in (a), (b) or (c) hereof, then Trading Day shall mean a Business Day.

“**Trading Market**” means whichever of the New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or the OTC Bulletin Board on which the Common Stock is listed or quoted for trading on the date in question.

“**Transfer Agent**” has the meaning set forth in Section 7.1(a).

“**Transaction Documents**” means this Agreement, the Pre-Funded Warrants and the Registration Rights Agreement.

“**Warrant Shares**” means the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants.

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

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

2. **Purchase and Sale of the Placement Securities.** On the Closing Date, upon the terms and subject to the conditions set forth herein, the Company will issue and sell, and each Investor will purchase, severally and not jointly, (a) the number of Shares set forth opposite the name of such Investor under the heading “Number of Shares” on **Exhibit A** attached hereto and (b) a Pre-Funded Warrant to purchase the number of Warrant Shares set forth opposite the name of such Investor under the heading “Number of Warrant Shares Underlying Pre-Funded Warrant” on **Exhibit A** attached hereto, if any. The purchase price per Share shall be \$0.64. The purchase price per Pre-Funded Warrant shall be \$0.6399. The Pre-Funded Warrants shall have an exercise price equal to \$0.0001 per Warrant Share.

3. **Closing.**

3.1 Upon the satisfaction or waiver of the conditions set forth in Section 6, the completion of the purchase and sale of the Placement Securities (the “Closing”) shall occur remotely via exchange of documents and signatures at a time (the “Closing Date”) to be agreed to by the Company and the Investors but (a) in no event earlier than the second Trading Day after the date hereof and (b) in no event later than the fifth Trading Day after the date hereof, and of which the Investors will be notified at least two Trading Days in advance by the Company.

3.2 On or before the Closing Date, each Investor shall deliver or cause to be delivered to the Company, via wire transfer of immediately available funds pursuant to the wire instructions delivered to such Investor by the Company at least two Trading Days prior to the Closing Date, an amount equal to the purchase price to be paid by the Investor for the Placement Securities to be acquired by it as set forth opposite the name of such Investor under the heading “Aggregate Purchase Price of Placement Securities” on **Exhibit A** attached hereto. If the Closing has not occurred for any reason on or prior to the fifth Trading Day after the date hereof and the Agreement has been terminated by the Investor pursuant to Section 6.3, the applicable purchase price shall be promptly returned to the applicable Investor.

3.3 At the Closing, the Company shall deliver or cause to be delivered to each Investor (a) a number of Shares, registered in the name of the Investor (or its nominee in accordance with its delivery instructions), equal to the number of Shares set forth opposite the name of such Investor under the heading “Number of Shares” on **Exhibit A** attached hereto and (b) a Pre-Funded Warrant, registered in the name of the Investor (or its nominee in accordance with its delivery instructions), to purchase up to the number of Warrant Shares set forth opposite the name of such Investor under the heading “Number of Warrant Shares Underlying Pre-Funded Warrant” on **Exhibit A** attached hereto, if any. The Shares shall be delivered via a book-entry record through the Transfer Agent and, as soon as practicable thereafter, the Company shall provide a copy of the records of the Transfer Agent showing the Investor as the owner of the Shares on and as of the Closing Date. Unless the Company and an Investor otherwise mutually agree with respect to such Investor’s Shares, at Closing settlement shall occur on a “delivery versus payment” basis.

4. **Representations and Warranties of the Company.** The Company hereby represents and warrants to the Investors that, except (a) as described in the Company's SEC Filings or (b) as set forth on the disclosure schedule delivered herewith (which is arranged in numbered and lettered sections corresponding to the numbered and lettered sections contained in this Section 4) (the "**Disclosure Schedule**"), each of which qualify these representations and warranties in their entirety:

4.1 **Organization, Good Standing and Qualification.** 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 the SEC Filings 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 reasonably be expected to, singly or in the aggregate, have a Material Adverse Effect on the Company and its subsidiaries, taken as a whole. Each subsidiary of the Company has been duly incorporated, organized or formed, is validly existing as a corporation or other business entity in good standing under the laws of the jurisdiction of its incorporation, organization or formation, has the corporate or other business entity power and authority to own or lease its property and to conduct its business as described in the SEC Filings 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, singly or in the aggregate, reasonably be expected to have a Material Adverse Effect on the Company and its subsidiaries, taken as a whole; all of the issued shares of capital stock or other equity interests of each subsidiary of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims.

4.2 **Authorization.** The Company has the requisite corporate power and authority and has taken all requisite corporate action necessary for, and no further action on the part of the Company, its officers, directors and stockholders is necessary for, (a) the authorization, execution and delivery of the Transaction Documents, (b) the authorization of the performance of all obligations of the Company hereunder or thereunder, and (c) the authorization, issuance (or reservation for issuance) and delivery of the Placement Securities. The Transaction Documents constitute the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability, relating to or affecting creditors' rights generally and to general equitable principles.

4.3 **Capitalization.** The Company is authorized under its Certificate of Incorporation to issue 200,000,000 shares of Common Stock. The Company's disclosure of its issued and outstanding capital stock in its most recent SEC Filing containing such disclosure was accurate in all material respects as of the date indicated in such SEC Filing. Since the date indicated in such SEC Filing, there has not been any change the Company's capital stock, other than (a) as a result of the exercise of stock options or the award of stock options or restricted stock units in the ordinary course of business pursuant to the Company's equity plans described in the SEC Filings and (b) the issuance of shares of Common Stock issuable pursuant to the Common Stock Purchase Agreement. All of the issued and outstanding shares of the Company's capital stock have been duly authorized and validly issued and are fully paid and nonassessable; none of such shares were issued in violation of any preemptive rights; and such shares were issued in compliance in all material respects with applicable state and federal securities law and any rights of third parties. No Person is entitled to preemptive or similar statutory or contractual rights with respect to the issuance by the Company of any securities of the Company, including, without limitation, the Securities. Except for stock options and restricted stock units approved pursuant to Company stock-based compensation plans described in the SEC Filings and warrants described in the SEC Filings, there are no outstanding warrants, options, convertible securities or other rights, agreements or arrangements of any character under which the Company is or may be obligated to issue any equity securities of any kind, except as contemplated by this Agreement and the Common Stock Purchase Agreement. Except for the Registration Rights Agreement and the Investor Rights Agreement, there are no voting agreements, buy-sell agreements, option or right of first purchase agreements or other agreements of any kind among the Company and any of the securityholders of the Company relating to the securities of the Company held by them. Except as provided in the Registration Rights Agreement and the Investor Rights Agreement, no Person has the right to require the Company to register any securities of the Company under the 1933

Act, whether on a demand basis or in connection with the registration of securities of the Company for its own account or for the account of any other Person.

The issuance and sale of the Placement Securities hereunder will not obligate the Company to issue shares of Common Stock or other securities to any other Person (other than the Investors) and will not result in the adjustment of the exercise, conversion, exchange or reset price of any outstanding security.

Except as provided for in the Investor Rights Agreement, the Company does not have outstanding stockholder purchase rights or a “poison pill” or any similar arrangement in effect giving any Person the right to purchase any equity interest in the Company upon the occurrence of certain events.

4.4 **Valid Issuance.** The Shares have been duly and validly authorized and, when issued and paid for pursuant to this Agreement, will be validly issued, fully paid and nonassessable, and shall be free and clear of all encumbrances and restrictions (other than those created by the Investors), except for restrictions on transfer set forth in the Transaction Documents or imposed by applicable securities laws. The Pre-Funded Warrants have been duly authorized and, when executed and delivered by the Company in accordance with this Agreement, will be valid and legally binding agreements of the Company, enforceable against the Company in accordance with their terms except as the enforcement thereof may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles. The Warrant Shares have been duly and validly authorized and reserved for issuance and, upon exercise of the Pre-Funded Warrants in accordance with their terms, including the payment of any exercise price therefor, will be validly issued, fully paid and nonassessable and will be free and clear of all encumbrances and restrictions (other than those created by the Investors), except for restrictions on transfer set forth in the Transaction Documents or imposed by applicable securities laws. Assuming the accuracy of the representations and warranties of each Investor in Section 5 hereof, the Warrant Shares will be issued in compliance with all applicable federal and state securities laws.

4.5 **Consents.** Subject to the accuracy of the representations and warranties of each Investor set forth in Section 5 hereof, the execution, delivery and performance by the Company of the Transaction Documents and the offer, issuance and sale of the Securities require no consent of, action by or in respect of, or filing with, any Person, governmental body, agency, or official other than (a) filings that have been made pursuant to applicable state securities laws, (b) post-sale filings pursuant to applicable state and federal securities laws, (d) filings pursuant to the rules and regulations of Nasdaq, (e) filing of the registration statement required to be filed by the Registration Rights Agreement and (f) filings required by the 1933 Act, 1934 Act, and the rules of the SEC. Subject to the accuracy of the representations and warranties of each Investor set forth in Section 5 hereof, the Company has taken all action necessary to exempt (i) the issuance and sale of the Securities and (ii) the other transactions contemplated by the Transaction Documents from the provisions of any stockholder rights plan or other “poison pill” arrangement, any anti-takeover, business combination or control share law or statute binding on the Company or to which the Company or any of its assets and properties is subject that is or could reasonably be expected to become applicable to the Investors as a result of the transactions contemplated hereby, including without limitation, the issuance of the Securities and the ownership, disposition or voting of the Shares or the Warrant Shares by the Investors or the exercise of any right granted to the Investors pursuant to this Agreement or the other Transaction Documents.

4.6 **Use of Proceeds.** The net proceeds of the sale of the Placement Securities hereunder shall be used by the Company for working capital and general corporate purposes.

4.7 **No Material Adverse Effect.** Since September 30, 2023, except as identified and described in the SEC Filings, there has not been:

(a) any change in the consolidated assets, liabilities, financial condition or operating results of the Company from that reflected in the financial statements included in the Company’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, except for changes in the ordinary course of business which have not had and would not reasonably be expected to have a Material Adverse Effect, individually or in the aggregate;

- (b) any declaration or payment by the Company of any dividend, or any authorization or payment by the Company of any distribution, on any of the capital stock of the Company, or any redemption or repurchase by the Company of any securities of the Company;
- (c) any material damage, destruction or loss, whether or not covered by insurance, to any assets or properties of the Company;
- (d) any waiver, not in the ordinary course of business, by the Company of a material right or of a material debt owed to it;
- (e) any satisfaction or discharge of any lien, claim or encumbrance or payment of any obligation by the Company, except in the ordinary course of business and which is not material to the assets, properties, financial condition, operating results or business of the Company (as such business is presently conducted);
- (f) any change or amendment to the Company's Certificate of Incorporation or Bylaws, or material change to any Material Contract or arrangement by which the Company is bound or to which any of its assets or properties is subject;
- (g) any material labor difficulties or, to the Company's Knowledge, labor union organizing activities with respect to employees of the Company;
- (h) any material transaction entered into by the Company other than in the ordinary course of business;
- (i) the loss of the services of any executive officer (as defined in Rule 405 under the 1933 Act); or
- (j) any other event or condition of any character that has had or would reasonably be expected to have a Material Adverse Effect.

4.8 **SEC Filings.** The Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the 1933 Act and the 1934 Act, including pursuant to Section 13(a) or 15(d) thereof, for the one year period preceding the date hereof (collectively, the "**SEC Filings**"). At the time of filing thereof, the SEC Filings complied in all material respects with the requirements of the 1933 Act or the 1934 Act, as applicable, and the rules and regulations of the SEC thereunder.

4.9 **No Conflict, Breach, Violation or Default.** The execution, delivery and performance of the Transaction Documents by the Company and the issuance and sale of the Securities in accordance with the provisions thereof will not, except (solely in the case of clause (a)(ii) and clause (b)) for such violations, conflicts or defaults as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, (a) conflict with or result in a breach or violation of (i) any of the terms and provisions of, or constitute a default under, the Company's Certificate of Incorporation or the Company's Bylaws, both as in effect on the date hereof (true and complete copies of which have been made available to the Investors through the Electronic Data Gathering, Analysis, and Retrieval system (the "**EDGAR system**")), or (ii) assuming the accuracy of the representations and warranties in Section 5, any applicable statute, rule, regulation or order of any governmental agency or body or any court, domestic or foreign, having jurisdiction over the Company or its subsidiaries, or any of their assets or properties, or (b) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any lien, encumbrance or other adverse claim upon any of the properties or assets of the Company or its subsidiaries or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any Material Contract. This Section 4.9 does not relate to matters with respect to tax status, which are the subject of Section 4.10, employee relations and labor matters, which are the subject of Section 4.13, or environmental laws, which are the subject of Section 4.15.

4.10 **Tax Matters.** The Company and each of 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, singly or in the aggregate, reasonably be expected to 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, singly or in the aggregate, reasonably be expected to 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 GAAP have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company or any of its subsidiaries which, singly or in the aggregate, has had (nor does the Company nor any of its subsidiaries have any notice or knowledge of any tax deficiency which could reasonably be expected to be determined adversely to the Company or its subsidiaries and which could reasonably be expected to have) a Material Adverse Effect on the Company and its subsidiaries, taken as a whole.

4.11 **Title to Properties.** The Company and each of its subsidiaries have good and marketable title to all real property owned by them and good and marketable title to all personal property owned by them, in each case, which is material to the business of the Company and its subsidiaries, and in each case, free and clear of all liens, encumbrances and defects, except such as are described in the SEC Filings or such as do not materially affect the value of such property and do not interfere in any material respect with the use made and proposed to be made of such property by the Company and its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are held by them, as applicable, under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere in any material respect with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries.

4.12 **Certificates, Authorities and Permits.** The Company and its subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, including, without limitation, from the Regulatory Authorities, and neither the Company nor any of its subsidiaries has 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 and its subsidiaries, taken as a whole, except as described in the SEC Filings.

4.13 **Labor Matters.** No material labor dispute with the employees of the Company or any of its subsidiaries exists, or, to the Company's Knowledge, 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 could, singly or in the aggregate, have a Material Adverse Effect on the Company and its subsidiaries, taken as a whole.

4.14 **Intellectual Property.** (a) The Company and its subsidiaries own or have a valid license to all pending patent applications and issued patents, inventions, copyrights, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks and trade names (collectively, "**Intellectual Property Rights**") used in or reasonably necessary to the conduct of their businesses in the manner described in the SEC Filings; (b) the Intellectual Property Rights owned by the Company and its subsidiaries and, to the Company's Knowledge, the Intellectual Property Rights licensed to the Company and its subsidiaries, are valid, subsisting and enforceable, and there is no pending or, to the Company's Knowledge, threatened action, suit, proceeding or claim by others challenging the validity, scope or enforceability of any such Intellectual Property Rights; (c) neither the Company nor any of its subsidiaries has received any notice alleging any infringement, misappropriation or other violation of Intellectual Property Rights 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 and its subsidiaries, taken as a whole, and, to the Company's Knowledge, none of the licensors, in relation to the Intellectual Property Rights licensed to the Company and its subsidiaries, have received any notice alleging any infringement, misappropriation or other violation of Intellectual Property Rights licensed to the Company and its subsidiaries 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 and its subsidiaries, taken as a whole; (d) to the Company's Knowledge, no third party is infringing, misappropriating or otherwise violating, or has infringed, misappropriated or otherwise violated, any Intellectual Property Rights owned by the Company or any of its subsidiaries, and any Intellectual Property Rights licensed to the Company and its subsidiaries, that would

materially adversely affect the Company and its subsidiaries, taken as a whole; (e) neither the Company nor any of its subsidiaries infringes, misappropriates or otherwise violates, or has infringed, misappropriated or otherwise violated, any Intellectual Property Rights of a third party in any material respect; (f) all employees or contractors engaged in the development of material Intellectual Property Rights on behalf of the Company or any subsidiary of the Company have executed an invention assignment agreement whereby such employees or contractors presently assign all of their right, title and interest in and to such Intellectual Property Rights to the Company or the applicable subsidiary, and to the Company's Knowledge no such agreement has been breached or violated; (g) the Company and its subsidiaries use, and have used, commercially reasonable efforts to appropriately maintain all information intended to be maintained as a trade secret; and (h) all employees or contractors engaged in the development of material trade secrets on behalf of the Company or any subsidiary of the Company have executed a confidentiality agreement with the Company or any subsidiary of the Company.

4.15 **Environmental Matters.** The Company and each of its subsidiaries (a) 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**"), (b) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (c) are in compliance with all terms and conditions of any such permit, license or approval, 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, reasonably be expected to have a Material Adverse Effect on the Company and its subsidiaries, taken as a whole.

4.16 **Legal Proceedings.** There are no legal, regulatory or governmental investigations, actions, suits or proceedings pending or, to the Company's knowledge, threatened to which the Company or any of its subsidiaries is a party or to which any of the properties of the Company or any of its subsidiaries is subject (a) other than proceedings described in the SEC filings and proceedings that would not, singly or in the aggregate, 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 (b) that are required to be described in the SEC Filings and are not so described in all material respects; and there are no contracts or other documents to which the Company or its subsidiaries are subject or bound that are required to be described in the SEC Filings that are not described in all material respects.

4.17 **Financial Statements.** The financial statements included in each SEC Filing comply in all material respects with applicable accounting requirements and the rules and regulations of the SEC with respect thereto as in effect at the time of filing (or to the extent corrected by a subsequent restatement) and present fairly, in all material respects, the consolidated financial position of the Company as of the dates shown and its consolidated results of operations and cash flows for the periods shown, subject in the case of unaudited financial statements to normal, immaterial year-end audit adjustments, and such consolidated financial statements have been prepared in conformity with United States generally accepted accounting principles applied on a consistent basis during the periods involved ("**GAAP**") (except as may be disclosed therein or in the notes thereto, and except that the unaudited financial statements may not contain all footnotes required by GAAP, and, in the case of quarterly financial statements, except as permitted by Form 10-Q under the 1934 Act). Except as set forth in the financial statements of the Company included in the SEC Filings filed prior to the date hereof, the Company has not incurred any liabilities, contingent or otherwise, except those incurred in the ordinary course of business, consistent (as to amount and nature) with past practices since the date of such financial statements, none of which, individually or in the aggregate, have had or would reasonably be expected to have a Material Adverse Effect.

4.18 **Insurance Coverage.** The Company and each of its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as, in the Company's reasonable judgment, are prudent and customary in the businesses in which they are engaged; neither the Company nor any of its subsidiaries has been refused any insurance coverage sought or applied for; and neither the Company nor any of its subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to, singly or in the aggregate, have a Material Adverse Effect on the Company and its subsidiaries, taken as a whole.

4.19 **Compliance with Nasdaq Continued Listing Requirements.** The Company is in compliance with applicable Nasdaq continued listing requirements. There are no proceedings pending or, to the Company's Knowledge, threatened against the Company relating to the continued listing of the Common Stock on Nasdaq and the Company has not received any notice of, nor to the Company's Knowledge is there any reasonable basis for, the delisting of the Common Stock from Nasdaq.

4.20 **Brokers and Finders.** Other than the Placement Agent, no Person will have, as a result of the transactions contemplated by the Transaction Documents, any valid right, interest or claim against or upon the Company or an Investor for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of the Company. No Investor shall have any obligation with respect to any fees, or with respect to any claims made by or on behalf of other Persons for fees, in each case of the type contemplated by this Section 4.20 that may be due in connection with the transactions contemplated by this Agreement or the Transaction Documents.

4.21 **No Directed Selling Efforts or General Solicitation.** Neither the Company nor its subsidiaries nor any Person acting on its or their behalf has conducted any general solicitation or general advertising (as those terms are used in Regulation D) in connection with the offer or sale of any of the Placement Securities.

4.22 **No Integrated Offering.** Neither the Company nor its subsidiaries nor any Person acting on their behalf has, directly or indirectly, made any offers or sales of any Company security or solicited any offers to buy any Company security, under circumstances that would (i) adversely affect reliance by the Company on Section 4(a)(2) for the exemption from registration for the transactions contemplated hereby or would require registration of the Placement Securities under the 1933 Act or (ii) cause the offer and sale of the Placement Securities pursuant to this Agreement to be integrated with prior offerings by the Company in a manner that would adversely affect reliance by the Company on Section 4(a)(2) for the exemption from registration for the transactions contemplated hereby or would require registration of the Placement Securities under the 1933 Act.

4.23 **Private Placement.** Assuming the accuracy of the representations and warranties of the Investors set forth in Section 5, the offer and sale of the Placement Securities to the Investors and the issuance of the Warrant Shares upon exercise of the Pre-Funded Warrants as contemplated hereby are exempt from the registration requirements of the 1933 Act. The issuance and sale of the Placement Securities and the issuance of the Warrant Shares upon the exercise of the Pre-Funded Warrants do not contravene the rules and regulations of Nasdaq.

4.24 **Questionable Payments.** (a) None of the Company or any of its subsidiaries or controlled affiliates, or any director, officer or employee thereof, or, to the Company's Knowledge, any agent or representative of the Company or of any of its subsidiaries or controlled affiliates, has taken or will take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment, 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 improperly influence official action, or to any person in violation of any applicable anti-corruption laws; (b) the Company and each of its subsidiaries and controlled affiliates have conducted their businesses in compliance with applicable anti-corruption laws and instituted at the time of the offering and will maintain policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; and (c) 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.

4.25 **No Conflicts with Anti-Money Laundering Laws.** The operations of the Company and each of 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 each of 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 having

jurisdiction over the Company or its subsidiaries (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 any of its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the Company’s Knowledge, threatened.

4.26 No Conflicts with Sanctions.

(a) None of the Company, any of its subsidiaries, or any director, officer, or employee thereof, or, to the Company’s Knowledge, any agent, affiliate or representative of the Company or any Person that is, or is owned or controlled by one or more Persons that are:

(i) the subject of any sanctions administered or enforced by the U.S. Department of the Treasury’s Office of Foreign Assets Control, the United Nations Security Council, the European Union, His Majesty’s Treasury, or other relevant sanctions authority (collectively, “**Sanctions**”), or

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

(b) 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:

(i) 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

(ii) 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);

(c) the Company and each of its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not knowingly 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.

4.27 Internal Controls. The Company maintains disclosure controls and procedures that comply with the requirements of the 1934 Act; such disclosure controls and procedures have been designed to ensure that material information relating to the Company is made known to the Company’s principal executive officer and principal financial officer by others within the Company; such disclosure controls and procedures are effective at the reasonable assurance level; and the Company has carried out evaluations of the effectiveness of its disclosure controls and procedures as required by Rule 13a-15 of the 1934 Act through September 30, 2023.

4.28 Disclosures. Neither the Company nor any Person acting on its behalf has provided the Investors or their agents or counsel with any information that constitutes or would reasonably be expected to constitute material nonpublic information concerning the Company or its subsidiaries, other than with respect to the transactions contemplated hereby and those contemplated by the Company X Transactions, which will be disclosed in the Press Release (as defined below) or in a Form 8-K filed with the SEC no later than the Business Day immediately following the date this Agreement is executed. The SEC Filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements contained therein, in light of the circumstances under which they were made, not misleading. The Company understands and confirms that the Investors will rely on the foregoing representations in effecting transactions in securities of the Company.

4.29 Required Filings. Except for the transactions contemplated by this Agreement, including the acquisition of the Placement Securities contemplated hereby, no event or circumstance has occurred or information exists with respect to the Company or its business, properties, operations or financial condition, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not

been so publicly announced or disclosed (assuming for this purpose that the SEC Filings are being incorporated by reference into an effective registration statement filed by the Company under the 1933 Act).

4.30 **Investment Company.** The Company is not, and immediately after giving effect to the offering and sale of the Placement Securities and the application of the proceeds thereof as described in this Agreement will not be, required to register as an “investment company” as such term is defined in the Investment Company Act of 1940, as amended.

4.31 **Health Care Laws.** 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 U.S. Food and Drug Administration (the “FDA”), and applicable foreign regulatory authorities, including the European Medicines Agency and the UK Medicines & Healthcare products Regulatory Agency (collectively, the “Regulatory Authorities”), except where failure to be in compliance would not be expected reasonably to have a material adverse effect on the Company and its subsidiaries, taken as a whole. For purposes of this Agreement, “Health Care Laws” means:

(a) the Federal Food, Drug, and Cosmetic Act and the regulations promulgated thereunder;

(b) all applicable federal, state, local and foreign health care laws, including, without limitation, the U.S. Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the Civil Monetary Penalties Law (42 U.S.C. § 1320a-7a), the U.S. Civil False Claims Act (31 U.S.C. Section 3729 et seq.), all applicable federal, state, local and all foreign criminal laws relating to health care fraud and abuse, including but not limited to the U.S. False Statements Law (42 U.S.C. Section 1320a-7b(a)), 18 U.S.C. Sections 286 and 287, and the health care fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) (42 U.S.C. Section 1320d et seq.), the U.S. Physician Payments Sunshine Act (42 U.S.C. Section 1320a-7h), the exclusions law, the statutes and regulations of applicable government funded or sponsored healthcare programs, and the regulations promulgated pursuant to such statutes;

(c) HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), and the regulations promulgated thereunder and any state or non-U.S. counterpart thereof to which the Company is subject, the purpose of which is to protect the privacy of individuals or prescribers;

(d) the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, the regulations promulgated thereunder;

(e) all other local, state, federal, national, supranational and foreign laws, relating to the regulation of the Company and the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company.

4.32 **Clinical Trials and Preclinical Studies.** (a) The preclinical studies, research tests and clinical trials conducted by or on behalf of or sponsored by the Company or in which the Company has participated that are described or referred to in the SEC Filings, were, and if still pending are, being conducted in all material respects in accordance with standard medical and experimental protocols, procedures and controls pursuant to all applicable Health Care Laws, the rules and regulations of the Regulatory Authorities and current Good Clinical Practices and Good Laboratory Practices; (b) the descriptions of the results of such studies and trials contained in the SEC Filings are accurate in all material respects and fairly present the data derived from such trials and studies; (c) to the Company’s Knowledge there are no preclinical studies, research tests or clinical trials, the results of which are materially inconsistent with or call into question in any material respect the results described or referred to in the SEC Filings, other than those described therein; and (d) the Company has not received any written and material notices, correspondence or other communications from any Regulatory Authority requiring or threatening the termination, material modification or suspension of any studies or trials that are described in the SEC Filings or the results of which are referred to in SEC Filings, and, to the Company’s Knowledge, there are no reasonable grounds for the same.

4.33 **Cyber and Data Security.** (a) The Company and each of its subsidiaries have complied and are presently in material compliance with all internal and external 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 with jurisdiction over the Company, in each case, relating to the collection, use, transfer, import, export, storage, protection, disposal and disclosure by the Company or any of its subsidiaries of personal, personally identifiable, household, sensitive, confidential or regulated data (“**Data Security Obligations**”, and such data, “**Data**”); (b) the Company has not received any notification of or complaint regarding and is unaware of any other facts that, singly or in the aggregate, would reasonably indicate material non-compliance with any Data Security Obligation; and (c) 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 material non-compliance with any Data Security Obligation. The Company and each of its subsidiaries have taken reasonable technical, physical and organizational measures to protect the information technology systems and Data used in connection with the operation of the Company’s and its subsidiaries’ businesses. 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, 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**”). To the Company’s knowledge, there has been no such Breach, and the Company and its subsidiaries have no knowledge of any event or condition that would reasonably be expected to result in any such Breach.

4.34 **Shell Company Status.** The Company is not, and has never been, an issuer identified in Rule 144(i)(1).

4.35 **No Additional Agreements.** Except for the Investor Rights Agreement, this Agreement and the Registration Rights Agreement, the Company has not entered into any other agreement or understanding (including, without limitation, side letters) with any Investor to purchase Securities on terms more favorable to such Investor than as set forth herein.

5. **Representations and Warranties of the Investors.** Each of the Investors hereby severally, and not jointly, represents and warrants to the Company that:

5.1 **Organization and Existence.** Such Investor is a duly incorporated or organized and validly existing corporation, limited partnership, limited liability company or other legal entity, has all requisite corporate, partnership or limited liability company power and authority to enter into and consummate the transactions contemplated by the Transaction Documents and to carry out its obligations hereunder and thereunder, and to invest in the Placement Securities pursuant to this Agreement, and is in good standing under the laws of the jurisdiction of its incorporation or organization.

5.2 **Authorization.** The execution, delivery and performance by such Investor of the Transaction Documents to which such Investor is a party have been duly authorized and each has been duly executed and when delivered will constitute the valid and legally binding obligation of such Investor, enforceable against such Investor in accordance with their respective terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability, relating to or affecting creditors’ rights generally, and general principles of equity.

5.3 **Purchase Entirely for Own Account.** The Placement Securities to be received by such Investor hereunder will be acquired for such Investor’s own account, not as nominee or agent, for the purpose of investment and not with a view to the resale or distribution of any part thereof in violation of the 1933 Act, and such Investor has no present intention of selling, granting any participation in, or otherwise distributing the same in violation of the 1933 Act without prejudice, however, to such Investor’s right at all times to sell or otherwise dispose of all or any part of such Placement Securities in compliance with applicable federal and state securities laws. The Placement Securities are being purchased by such Investor in the ordinary course of its business. Nothing contained herein shall be deemed a representation or warranty by such Investor to hold the Placement Securities for any period of time.

Such Investor is not a broker-dealer registered with the SEC under the 1934 Act or an entity engaged in a business that would require it to be so registered.

5.4 **Investment Experience.** Such Investor acknowledges that it can bear the economic risk and complete loss of its investment in the Placement Securities and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment contemplated hereby.

5.5 **Disclosure of Information.** Such Investor has had an opportunity to receive, review and understand all information related to the Company requested by it and to ask questions of and receive answers from the Company regarding the Company, its business and the terms and conditions of the offering of the Securities, and has conducted and completed its own independent due diligence. Such Investor acknowledges that copies of the SEC Filings are available on the EDGAR system. Based on the information such Investor has deemed appropriate, and without reliance on the Placement Agent, it has independently made its own analysis and decision to enter into the Transaction Documents. Such Investor is relying exclusively on its own investment analysis and due diligence (including professional advice it deems appropriate) with respect to the execution, delivery and performance of the Transaction Documents, the Securities and the business, condition (financial and otherwise), management, operations, properties and prospects of the Company, including but not limited to all business, legal, regulatory, accounting, credit and tax matters. Neither such inquiries nor any other due diligence investigation conducted by such Investor shall modify, limit or otherwise affect such Investor's right to rely on the Company's representations and warranties contained in this Agreement. Such Investor understands that the Placement Agent has acted solely as the agent of the Company in this placement of the Placement Securities and such Investor has not relied on the business or legal advice of the Placement Agent or any of their agents, counsel or affiliates in making its investment decision hereunder, and confirms that none of such persons has made any representations or warranties to such Investor in connection with the transactions contemplated hereby.

5.6 **Investor Excluded Information.** Such Investor acknowledges that: (a) the Company, its affiliates, employees, representatives or agents currently may have, and later may come into possession of, information with respect to the Company that is not known to such Investor relating to the Company X Transactions and that may be material to a decision to purchase the Placement Securities ("**Investor Excluded Information**"), (b) they have determined to purchase the Placement Securities notwithstanding such Investor's lack of knowledge of the Investor Excluded Information, and (c) neither the Company, nor any of its affiliates, employees, representatives or agents shall have any liability to such Investor whether under applicable securities laws or otherwise, with respect to the nondisclosure of any Investor Excluded Information in connection with the purchase of the Placement Securities and the transactions contemplated by this Agreement, and such Investor hereby waives any claims it may have, or which may arise in the future, with respect thereto.

5.7 **Restricted Securities.** Such Investor understands that the Securities are characterized as "restricted securities" under the U.S. federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and have not been registered under the 1933 Act or any state securities law in reliance on the availability of an exemption from such registration and that under such laws and applicable regulations such securities may be resold without registration under the 1933 Act only in certain limited circumstances.

5.8 **Legends.** It is understood that, except as provided below, certificates or book-entry records evidencing the Securities may bear the following or any similar legend:

(a) "The securities represented hereby [and the securities issuable upon exercise of these securities] have not been registered with the Securities and Exchange Commission or the securities commission of any state but have been [or will be] issued in reliance upon an exemption from registration under the Securities Act of 1933, as amended, and, accordingly, may not be transferred unless (a) such securities have been registered for sale pursuant to the Securities Act of 1933, as amended, (b) such securities may be sold pursuant to Rule 144, (c) the Company has received an opinion of counsel reasonably satisfactory to it that such transfer may lawfully be made without registration under the Securities Act of 1933, as amended, or (d) the securities are transferred without consideration to an affiliate of such holder or a custodial nominee (which for the avoidance of doubt shall require neither consent nor the delivery of an opinion)."

(b) If required by the authorities of any state in connection with the issuance of sale of the Securities, the legend required by such state authority.

5.9 **Accredited Investor.** Such Investor is (a) an “accredited investor” within the meaning of Rule 501(a) of Regulation D. Such Investor has executed and delivered to the Company a questionnaire in substantially the form attached hereto as **Exhibit E** (the “**Investor Questionnaire**”), which such Investor represents and warrants is true, correct and complete. Such investor is a sophisticated institutional investor with sufficient knowledge and experience in investing in private equity transactions to properly evaluate the risks and merits of its purchase of the Securities. Such Investor has determined based on its own independent review and such professional advice as it deems appropriate that its purchase of the Securities and participation in the transactions contemplated by the Transaction Documents (i) are fully consistent with its financial needs, objectives and condition, (ii) comply and are fully consistent with all investment policies, guidelines and other restrictions applicable to such Investor, (iii) have been duly authorized and approved by all necessary action, (iv) do not and will not violate or constitute a default under such Investor’s charter, bylaws or other constituent document or under any law, rule, regulation, agreement or other obligation by which such Investor is bound and (v) are a fit, proper and suitable investment for such Investor, notwithstanding the substantial risks inherent in investing in or holding the Securities.

5.10 **No General Solicitation.** Such Investor did not learn of the investment in the Securities as a result of any general or public solicitation or general advertising, or publicly disseminated advertisements or sales literature, including (a) any advertisement, article, notice or other communication published in any newspaper, magazine, website, or similar media, or broadcast over television or radio, or (b) any seminar or meeting to which such Investor was invited by any of the foregoing means of communications.

5.11 **Brokers and Finders.** Other than the Placement Agent, no Person will have, as a result of the transactions contemplated by the Transaction Documents, any valid right, interest or claim against or upon the Company or an Investor for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of such Investor.

5.12 **Short Sales and Confidentiality Prior to the Date Hereof.** Other than consummating the transactions contemplated hereunder, such Investor has not, nor has any Person acting on behalf of or pursuant to any understanding with such Investor, directly or indirectly executed any purchases or sales, including Short Sales, of the securities of the Company during the period commencing as of the time that such Investor was first contacted by the Company, the Placement Agent or any other Person regarding the transactions contemplated hereby and ending immediately prior to the date hereof. Notwithstanding the foregoing, in the case of an Investor that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Investor’s assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Investor’s assets, the representation set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement. Other than to other Persons party to this Agreement and other than to such Person’s outside attorney, accountant, auditor or investment advisor only to the extent deemed reasonably necessary by such Investor to permit evaluation of the investment, and the performance of the necessary or required tax, accounting, financial, legal, or administrative tasks and services and other than as may be required by law, such Investor has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction). Notwithstanding the foregoing, for avoidance of doubt, nothing contained in this Section 5.12 shall constitute a representation or warranty, or preclude any actions, with respect to the identification of the availability of, or securing of, available shares to borrow in order to effect Short Sales or similar transactions in the future.

5.13 **No Government Recommendation or Approval.** Such Investor understands that no United States federal or state agency, or similar agency of any other country, has reviewed, approved, passed upon, or made any recommendation or endorsement of the Company or the purchase of the Securities.

5.14 **No Intent to Effect a Change of Control.** Such Investor has no present intent to effect a “change of control” of the Company as such term is understood under the rules promulgated pursuant to Section 13(d) of the 1934 Act.

5.15 **Residency.** Such Investor's office in which its investment decision with respect to the Securities was made is located at the address immediately below such Investor's name on its signature page hereto.

5.16 **No Conflicts.** The execution, delivery and performance by such Investor of the Transaction Documents and the consummation by such Investor of the transactions contemplated hereby and thereby will not (a) result in a violation of the organizational documents of such Investor, (b) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which such Investor is a party, or (c) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws) applicable to such Investor, except in the case of clauses (b) and (c) above, for such conflicts, defaults, rights or violations which would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the ability of such Investor to perform its obligations hereunder.

5.17 **Placement Agent.** Such Investor hereby acknowledges and agrees for the express benefit of the Placement Agent that (a) the Placement Agent is acting solely as placement agent for the Company in connection with the execution, delivery and performance of the Transaction Documents and is not acting as an underwriter or in any other capacity and is not and shall not be construed as a fiduciary for such Investor, the Company or any other person or entity in connection with the execution, delivery and performance of the Transaction Documents, (b) the Placement Agent shall not be liable for any improper payment made in accordance with the information provided by the Company, (c) the Placement Agent has not made or will not make any representation or warranty, whether express or implied, of any kind or character, or has provided any advice or recommendation in connection with the execution, delivery and performance of the Transaction Documents, (d) the Placement Agent will not have any responsibility with respect to any information, certificates or documentation delivered by or on behalf of the Company pursuant to this Agreement, including (i) any representations, warranties or agreements made by any person or entity under or in connection with the execution, delivery and performance of the Transaction Documents, or the execution, legality, validity or enforceability (with respect to any person) thereof, (ii) the business, affairs, financial condition, operations, properties or prospects of, or any other matter concerning the Company, or (iii) any valuation, offering or marketing materials, or any omissions from such materials, and (e) the Placement Agent will not have any liability or obligation (including without limitation, for or with respect to any losses, claims, damages, obligations, penalties, judgments, awards, liabilities, costs, expenses or disbursements incurred by such Investor, the Company or any other person or entity), whether in contract, tort or otherwise, to such Investor, or to any person claiming through it, in respect of the execution, delivery and performance of the Transaction Documents or for anything otherwise in connection with the purchase and sale of the Placement Securities. Each party hereto agrees for the express benefit of the Placement Agent that the Placement Agent, its affiliates and representatives shall be entitled to rely on, and shall be protected in acting upon, any certificate, instrument, opinion, notice, letter or any other document delivered to the Placement Agent or any Purchaser by or on behalf of the Company.

6. **Conditions to Closing.**

6.1 **Conditions to the Investors' Obligations.** The obligation of each Investor to purchase the Placement Securities at the Closing is subject to the fulfillment to such Investor's satisfaction, on or prior to the Closing Date, of the following conditions, any of which may be waived by such Investor (as to itself only):

(a) The representations and warranties made by the Company in Section 4 hereof, as qualified by the Disclosure Schedule and the SEC Filings filed prior to the Execution Date, shall be true and correct in all material respects, except for those representation and warranties qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects, as of the date hereof and as of the Closing Date, as though made on and as of such date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct in all material respects, except for those representations and warranties qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects, as of such earlier date. The Company shall have performed in all material respects all obligations and covenants herein required to be performed by it on or prior to the Closing Date.

(b) The Company shall have obtained any and all consents, permits, approvals, registrations and waivers necessary for the consummation of the purchase and sale of the Placement Securities and the

consummation of the other transactions contemplated by the Transaction Documents, all of which shall be in full force and effect.

(c) The Company shall have executed and delivered the Registration Rights Agreement.

(d) The Company shall have filed with Nasdaq a Listing of Additional Shares notice form for the listing of the Shares and the Warrant Shares and shall not have received any objection to such notice from Nasdaq.

(e) No judgment, writ, order, injunction, award or decree of or by any court, or judge, justice or magistrate, including any bankruptcy court or judge, or any order of or by any governmental authority, shall have been issued, and no action or proceeding shall have been instituted by any governmental authority, enjoining or preventing the consummation of the transactions contemplated hereby or in the other Transaction Documents.

(f) The Company shall have delivered a Certificate, executed on behalf of the Company by its Chief Executive Officer, dated as of the Closing Date, certifying to the fulfillment of the conditions specified in subsections (a), (b), (e), (i) and (j) of this Section 6.1.

(g) The Company shall have delivered a Certificate, executed on behalf of the Company by its Secretary, dated as of the Closing Date, certifying the resolutions adopted by the Board of Directors of the Company approving the transactions contemplated by this Agreement, the other Transaction Documents, and the issuance of the Securities, certifying the current versions of the Certificate of Incorporation and Bylaws of the Company and certifying as to the signatures and authority of persons signing the Transaction Documents and related documents on behalf of the Company.

(h) The Investors shall have received an opinion from Wilmer Cutler Pickering Hale and Dorr LLP, the Company's counsel, dated as of the Closing Date, in form and substance reasonable acceptable to the Investors.

(i) There shall have been no Material Adverse Effect with respect to the Company since the date hereof.

(j) No stop order or suspension of trading shall have been imposed by Nasdaq, the SEC or any other governmental or regulatory body with respect to public trading in the Common Stock.

(k) The Lock-Up Agreements shall have been executed by each executive officer and director of the Company, and each such Lock-Up Agreement shall be in full force and effect on the Closing Date.

6.2 Conditions to Obligations of the Company. The Company's obligation to sell and issue Placement Securities to any Investor is subject to the fulfillment to the satisfaction of the Company on or prior to the Closing Date of the following conditions, any of which may be waived by the Company:

(a) The representations and warranties made by such Investor in Section 5 hereof shall be true and correct in all material respects as of the date hereof, and shall be true and correct in all material respects, except for those representations and warranties qualified by materiality or material adverse effect, which shall be true and correct in all respects, as of the Closing Date, as though made on and as of such date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct in all material respects as of such earlier date. Such Investor shall have performed in all material respects all obligations and covenants herein required to be performed by it on or prior to the Closing Date.

(b) Such Investor shall have executed and delivered the Registration Rights Agreement and an Investor Questionnaire.

(c) Any Investor purchasing Placement Securities at the Closing shall have paid in full its purchase price to the Company.

6.3 Termination of Obligations to Effect Closing; Effects.

(a) The obligations of the Company, on the one hand, and the Investors, on the other hand, to effect the Closing shall terminate as follows:

(i) upon the mutual written consent of the Company and Investors that agreed to purchase a majority of the Placement Securities to be issued and sold pursuant to this Agreement;

(ii) by the Company if any of the conditions set forth in Section 6.2 shall have become incapable of fulfillment, and shall not have been waived by the Company;

(iii) by an Investor (with respect to itself only) if any of the conditions set forth in Section 6.1 shall have become incapable of fulfillment, and shall not have been waived by such Investor; or

(iv) by either the Company or any Investor (with respect to itself only) if the Closing has not occurred on or prior to the fifth Trading Day following the date of this Agreement;

provided, however, that, except in the case of clause (i) above, the party seeking to terminate its obligation to effect the Closing shall not then be in breach of any of its representations, warranties, covenants or agreements contained in this Agreement or the other Transaction Documents if such breach has resulted in the circumstances giving rise to such party's seeking to terminate its obligation to effect the Closing.

(b) In the event of termination by the Company or any Investor of its obligations to effect the Closing pursuant to Section 6.3(a)(ii) through (iv), written notice thereof shall be given to the other Investors by the Company and the other Investors shall have the right to terminate their obligations to effect the Closing upon written notice to the Company and the other Investors. Nothing in this Section 6.3 shall be deemed to release any party from any liability for any breach by such party of the terms and provisions of this Agreement or the other Transaction Documents or to impair the right of any party to compel specific performance by any other party of its obligations under this Agreement or the other Transaction Documents.

7. Covenants and Agreements of the Parties

7.1 **Nasdaq Listing.** The Company will use commercially reasonable efforts to continue the listing and trading of its Common Stock on Nasdaq and, in accordance therewith, will use commercially reasonable efforts to comply in all material respects with the Company's reporting, filing and other obligations under the bylaws or rules of such market or exchange, as applicable.

7.2 Removal of Legends.

(a) In connection with any sale, assignment, transfer or other disposition of the Shares or Warrant Shares by an Investor pursuant to Rule 144 or pursuant to any other exemption under the 1933 Act such that the purchaser acquires freely tradable shares and upon compliance by the Investor with the requirements of this Agreement, if requested by the Investor, the Company shall request the transfer agent for the Common Stock (the "**Transfer Agent**") to remove any restrictive legends related to the book entry account holding such Shares or Warrant Shares and to make a new, unlegended entry for such book entry shares sold or disposed of without restrictive legends within two (2) Trading Days of any such request therefor from such Investor, provided that the Company has timely received from the Investor customary representations and other documentation reasonably acceptable to the Company in connection therewith.

(b) Subject to receipt from the Investor by the Company and the Transfer Agent of customary representations and other documentation reasonably acceptable to the Company and the Transfer Agent in connection therewith, upon the earliest of such time as the Shares or Warrant Shares (a) have been registered

under the 1933 Act pursuant to an effective registration statement, (b) have been sold pursuant to Rule 144 or any other exemption under the 1933 Act, or (c) are eligible for resale under Rule 144(b)(1) or any successor provision, the Company shall, in accordance with the provisions of this Section 7.2(b) and within two (2) Trading Days of any request therefor from an Investor accompanied by such customary and reasonably acceptable documentation referred to above, (i) deliver to the Transfer Agent irrevocable instructions that the Transfer Agent shall make a new, unlegended entry for such book entry Shares or Warrant Shares, and (ii) cause its counsel to deliver to the Transfer Agent one or more opinions to the effect that the removal of such legends in such circumstances may be effected under the 1933 Act if required by the Transfer Agent to effect the removal of the legend in accordance with the provisions of this Agreement. Any shares subject to legend removal under this Section 7.2 may be transmitted by the Transfer Agent to the Investor by crediting the account of the Investor's prime broker with the DTC System as directed by such Investor. The Company shall be responsible for the fees of its Transfer Agent and all DTC fees associated with such issuance.

7.3 Transfer Restrictions. Each Investor agrees that it will sell, transfer or otherwise dispose of the Placement Securities only in compliance with all applicable state and federal securities laws and that any Placement Securities sold by such Investor pursuant to an effective registration statement will be sold in compliance with the plan of distribution set forth therein.

7.4 Subsequent Equity Sales by the Company. The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the 1933 Act) that will be integrated with the offer or sale of the Placement Securities in a manner that would require the registration under the 1933 Act of the sale of the Placement Securities to the Investors, or that will be integrated with the offer or sale of the Placement Securities for purposes of the rules and regulations of any trading market such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction. The Company shall not take any action or steps that would adversely affect reliance by the Company on Section 4(a)(2) for the exemption from registration for the transactions contemplated hereby or require registration of the Securities under the 1933 Act.

7.5 Fees. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, or broker's commissions (other than for Persons engaged by any Investor) relating to or arising out of the transactions contemplated hereby, including, without limitation, any fees or commissions payable to the Placement Agent.

7.6 Reservation of Common Stock. The Company will reserve and keep available at all times, free of preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue all of the Warrant Shares upon conversion of any Pre-Funded Warrant.

7.7 Short Sales and Confidentiality After the Date Hereof. Each Investor covenants that it will not, nor will it cause any Affiliates acting on its behalf or pursuant to any understanding with it to, execute any Short Sales during the period from the date hereof until the earlier of such time as (a) the transactions contemplated by this Agreement are first publicly announced or (b) this Agreement is terminated in full. Notwithstanding the foregoing, in the case of an Investor that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Investor's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Investor's assets, the covenant set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Placement Securities covered by this Agreement. Each Investor covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company, such Investor will maintain the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction), other than to such Person's outside attorney, accountant, auditor or investment advisor only to the extent necessary to permit evaluation of the investment, and the performance of the necessary or required tax, accounting, financial, legal, or administrative tasks and services and other than as may be required by law. Each Investor understands and acknowledges that the SEC currently takes the position that coverage of Short Sales of shares of the Common Stock "against the box" prior to effectiveness of a resale registration statement with securities included in such registration statement would be a violation of Section 5 of the

1933 Act, as set forth in Item 239.10 of the Placement Securities Act Rules Compliance and Disclosure Interpretations compiled by the Office of Chief Counsel, Division of Corporation Finance.

7.8 **Tax Matters.** The parties agree that the Pre-Funded Warrants are intended to and shall be treated as stock in the Company for U.S. federal, state and local income tax purposes, and the parties shall file their tax returns and otherwise act consistently with such treatment except as otherwise required by a final determination within the meaning of Section 1313 of the Internal Revenue Code of 1986, as amended.

7.9 **Filings.** The Company shall make all filings with the SEC and its Trading Market as required by the transactions contemplated hereby. With respect to any exercise of a Pre-Funded Warrant into Common Stock, the Company and each Investor (i) shall use their respective commercially reasonable efforts to promptly file or cause to be filed, (x) within 10 Business Days from the date that either the Company or any Investor provides any notice of exercise (for which within five Business Days the Investor determines that a filing under the Hart Scott-Rodino Antitrust Improvements Act of 1976, as amended (the “**HSR Act**”), is required, and so notifies the Company), all required filings under the HSR Act and, (y) as promptly as reasonably practicable, all required filings under other applicable antitrust laws that the Company or any Investor reasonably determines in good faith to be necessary or appropriate to effect the transactions contemplated by this Agreement including but not limited to, the exercise of any Pre-Funded Warrant into Common Stock, (ii) shall consult and cooperate with each other in the preparation of such filings, and (iii) shall promptly inform the other parties of any material communication received by such party from any Governmental Entity regarding the transactions contemplated by this Agreement and shall enable the other party to participate in any communications and meetings with any Governmental Entity regarding the transactions contemplated by this Agreement unless prohibited by the Governmental Entity. Each of the Company and any Investor that files such notice pursuant to the HSR Act or any other applicable antitrust law in accordance with the preceding sentence acknowledges that no exercise of any Pre-Funded Warrant into Common Stock will be consummated until any waiting period prescribed under the HSR Act or any other applicable antitrust law has elapsed.

7.10 **Lock-Up Agreements.** The Company shall not amend, modify, waive or terminate any provision of any of the Lock-Up Agreements and shall enforce the provisions of each Lock-Up Agreement in accordance with its terms. If any party to a Lock-Up Agreement breaches any provision of a Lock-Up Agreement, the Company shall promptly use commercially reasonable efforts to seek specific performance of the terms of such Lock-Up Agreement.

8. **Survival and Indemnification.**

8.1 **Survival.** The representations, warranties, covenants and agreements contained in this Agreement shall survive the Closing of the transactions contemplated by this Agreement for the applicable statute of limitations.

8.2 **Indemnification.** The Company agrees to indemnify and hold harmless each Investor and its Affiliates, and their respective directors, officers, trustees, members, managers, employees, investment advisers and agents, from and against any and all losses, claims, damages, liabilities and expenses (including without limitation reasonable and documented attorney fees and disbursements and other documented out-of-pocket expenses reasonably incurred in connection with investigating, preparing or defending any action, claim or proceeding, pending or threatened and the costs of enforcement thereof) to which such Person may become subject as a result of any breach of representation, warranty, covenant or agreement made by or to be performed on the part of the Company under the Transaction Documents, and will reimburse any such Person for all such amounts as they are incurred by such Person solely to the extent such amounts have been finally judicially determined not to have resulted from such Person’s fraud or willful misconduct.

8.3 **Conduct of Indemnification Proceedings.** Any person entitled to indemnification hereunder shall (a) give prompt written notice to the indemnifying party of any claim with respect to which it seeks indemnification and (b) permit such indemnifying party to assume the defense of such claim with counsel reasonably satisfactory to the indemnified party; *provided* that any person entitled to indemnification hereunder shall have the right to employ separate counsel and to participate in the defense of such claim, but the fees and expenses of such counsel shall be at the expense of such person unless (i) the indemnifying party has agreed in writing to pay such fees or expenses, (ii) the indemnifying party shall have failed to assume the defense of such claim and employ

counsel reasonably satisfactory to such person or (iii) in the reasonable judgment of any such person, based upon written advice of its counsel, a conflict of interest exists between such person and the indemnifying party with respect to such claims (in which case, if the person notifies the indemnifying party in writing that such person elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of such claim on behalf of such person); and *provided, further*, that the failure of any indemnified party to give written notice as provided herein shall not relieve the indemnifying party of its obligations hereunder, except to the extent that such failure to give notice shall materially adversely affect the indemnifying party in the defense of any such claim or litigation. It is understood that the indemnifying party shall not, in connection with any proceeding in the same jurisdiction, be liable for fees or expenses of more than one separate firm of attorneys at any time for all such indemnified parties. No indemnifying party will, except with the consent of the indemnified party, which consent shall not be unreasonably withheld, conditioned or delayed, consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect of such claim or litigation. No indemnified party will, except with the consent of the indemnifying party, which consent shall not be unreasonably withheld, conditioned or delayed, consent to entry of any judgment or enter into any settlement.

9. **Miscellaneous.**

9.1 **Successors and Assigns.** This Agreement may not be assigned by a party hereto without the prior written consent of the Company or each of the Investors, as applicable, provided, however, that an Investor may assign its rights and delegate its duties hereunder in whole or in part to an Affiliate or to a third party acquiring some or all of its Securities in a transaction complying with applicable securities laws without the prior written consent of the Company or the other Investors, provided such assignee agrees in writing to be bound by the provisions hereof that apply to Investors. The provisions of this Agreement shall inure to the benefit of and be binding upon the respective permitted successors and assigns of the parties. Without limiting the generality of the foregoing, in the event that the Company is a party to a merger, consolidation, share exchange or similar business combination transaction in which the Common Stock is converted into the equity securities of another Person, from and after the effective time of such transaction, such Person shall, by virtue of such transaction, be deemed to have assumed the obligations of the Company hereunder, the term "Company" shall be deemed to refer to such Person and the term "Securities" shall be deemed to refer to the securities received by the Investors in connection with such transaction. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective permitted successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

9.2 **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signatures complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

9.3 **Titles and Subtitles.** The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

9.4 **Notices.** Unless otherwise provided, any notice required or permitted under this Agreement shall be given in writing and shall be deemed effectively given as hereinafter described (a) if given by personal delivery, then such notice shall be deemed given upon such delivery, (b) if given by e-mail, then such notice shall be deemed given upon receipt of confirmation of receipt of an e-mail transmission, (c) if given by mail, then such notice shall be deemed given upon the earlier of (i) receipt of such notice by the recipient or (ii) three days after such notice is deposited in first class mail, postage prepaid, and (d) if given by an internationally recognized overnight air courier, then such notice shall be deemed given one Business Day after delivery to such carrier. All notices shall be addressed to the party to be notified at the address as follows, or at such other address as such party may designate by ten days' advance written notice to the other party:

If to the Company:

Xilio Therapeutics, Inc.

828 Winter Street, Suite 300
Waltham, MA 02451
Attention: Chief Operating Officer
Email: cfrankenfield@xiliotx.com

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

Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street Boston, MA 02109
Attention: Cynthia Mazareas
Email: cynthia.mazareas@wilmerhale.com

If to the Investors:

Only to the addresses set forth on the signature pages hereto.

9.5 **Expenses.** The parties hereto shall pay their own costs and expenses in connection herewith regardless of whether the transactions contemplated hereby are consummated; it being understood that each of the Company and each Investor has relied on the advice of its own respective counsel.

9.6 **Amendments and Waivers.** Prior to Closing, no amendment or waiver of any provision of this Agreement will be effective with respect to any party unless made in writing and signed by a duly authorized representative of such party. Following the Closing, any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Required Investors. Notwithstanding the foregoing, this Agreement may not be amended and the observance of any term of this Agreement may not be waived with respect to any Investor without the written consent of such Investor unless such amendment or waiver applies to all Investors in the same fashion. Any amendment or waiver effected in accordance with this paragraph shall be binding upon (a) prior to Closing, each Investor that signed such amendment or waiver and (b) following the Closing, each holder of any Securities purchased under this Agreement at the time outstanding, and in each case, each future holder of all such Securities and the Company.

9.7 **Publicity.** Except as set forth below, no public release or announcement concerning the transactions contemplated hereby shall be issued by the Investors without the prior consent of the Company, except as such release or announcement may be required by law or the applicable rules or regulations of any securities exchange or securities market, in which case the Investors shall allow the Company reasonable time to comment on such release or announcement in advance of such issuance. Notwithstanding the foregoing, each Investor may identify the Company and the value of such Investor's security holdings in the Company in accordance with applicable investment reporting and disclosure regulations or internal policies without prior notice to or consent from the Company (including, for the avoidance of doubt, filings pursuant to Sections 13 and 16 of the 1934 Act). The Company shall not include the name of any Investor or any Affiliate or investment adviser of such Investor in any press release or public announcement (which, for the avoidance of doubt, shall not include any SEC Filing to the extent such disclosure is required by SEC rules and regulations) without the prior written consent of such Investor. No later than the Business Day immediately following the date this Agreement is executed, the Company shall issue a press release disclosing all material terms of the transactions contemplated by this Agreement and those contemplated by the Company X Transactions and any material non-public information that the Company may have provided any Investor in connection with the transactions contemplated by this Agreement at any time prior to the issuance of such press release (the "**Press Release**"). In addition, the Company will make such other filings and notices in the manner and time required by the SEC or Nasdaq. From and after the issuance of the Press Release, no Investor shall be in possession of any material non-public information provided by the Company, its subsidiaries or any of their respective officers, directors, employees or agents (including the Placement Agent) in connection with the transactions contemplated by this Agreement.

9.8 **Third-Party Beneficiaries.** The Company acknowledges and agrees and the Investors acknowledge and agree that each Placement Agent is a third-party beneficiary of the representations and warranties

contained in Section 4 and Section 5, respectively, and accordingly will be entitled to rely on the representations and warranties contained therein.

9.9 **Severability.** Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof but shall be interpreted as if it were written so as to be enforceable to the maximum extent permitted by applicable law, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by applicable law, the parties hereby waive any provision of law which renders any provision hereof prohibited or unenforceable in any respect.

9.10 **Entire Agreement.** This Agreement, including the signature pages, Exhibits, the other Transaction Documents and any confidentiality agreement between the Company and each Investor constitute the entire agreement among the parties hereof with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, both oral and written, between the parties with respect to the subject matter hereof and thereof.

9.11 **Further Assurances.** The parties shall execute and deliver all such further instruments and documents and take all such other actions as may reasonably be required to carry out the transactions contemplated hereby and to evidence the fulfillment of the agreements herein contained.

9.12 **Governing Law.** This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware. Service of process in connection with any such suit, action or proceeding may be served on each party hereto anywhere in the world by the same methods as are specified for the giving of notices under this Agreement.

9.13 **Independent Nature of Investors' Obligations and Rights.** The obligations of each Investor under any Transaction Document are several and not joint with the obligations of any other Investor, and no Investor shall be responsible in any way for the performance of the obligations of any other Investor under any Transaction Document. The decision of each Investor to purchase Placement Securities pursuant to the Transaction Documents has been made by such Investor independently of any other Investor. Nothing contained herein or in any Transaction Document, and no action taken by any Investor pursuant thereto, shall be deemed to constitute the Investors as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Investor acknowledges that no other Investor has acted as agent for such Investor in connection with making its investment hereunder and that no Investor will be acting as agent of such Investor in connection with monitoring its investment in the Securities or enforcing its rights under the Transaction Documents. Each Investor shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Investor to be joined as an additional party in any proceeding for such purpose. The Company acknowledges that each of the Investors has been provided with the same Transaction Documents for the purpose of closing a transaction with multiple Investors and not because it was required or requested to do so by any Investor. It is expressly understood and agreed that each provision contained in this Agreement is between the Company and an Investor, solely, and not between the Company and the Investors collectively and not between and among the Investors.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have executed this Agreement or caused their duly authorized officers to execute this Agreement as of the date first above written.

COMPANY:

XILIO THERAPEUTICS, INC.

By: /s/ René Russo

Name: René Russo

Title: President and Chief Executive Officer

[Signature Page to Securities Purchase Agreement]

INVESTOR:

BCLS II Equity Opportunities, LP

By: BCLS II Equity Opportunities GP, LLC,
its general partner

By: Bain Capital Life Sciences Fund II, L.P.,
its general partner

By: Bain Capital Life Sciences Investors II, LLC,
its general partner

By: Bain Capital Life Sciences Investors, LLC,
its general partner

By: /s/ Andrew Hack _____

Name: Andrew Hack

Title: Partner

[Signature Page to Securities Purchase Agreement]

INVESTOR:

Rock Springs Capital Master Fund LP

By: Rock Springs General Partner LLC,
its general partner

By: /s/ Kris Jenner

Name: Kris Jenner

Title: Member

Address: [**]

Email: [**]

[Signature Page to Securities Purchase Agreement]

INVESTOR:

Four Pines Master Fund LP

By: Four Pines General Partner LLC,
its general partner

By: /s/ Kris Jenner

Name: Kris Jenner

Title: Member

Address: [**]

Email: [**]

[Signature Page to Securities Purchase Agreement]

INVESTOR:

Irving Investors, LLC

By: /s/ Jeremy Abelson

Name: Jeremy Abelson

Title: Authorized Signatory

Address: [**]

Email: [**]

[Signature Page to Securities Purchase Agreement]

EXHIBIT A

Schedule of Investors

Investor Name	Number of Shares	Number of Warrant Shares Underlying Pre-Funded Warrant	Aggregate Purchase Price of Securities
BCLS II Equity Opportunities, LP	—	15,627,441	\$9,999,999.50
Rock Springs Capital Masters Fund LP	1,330,625	—	\$851,600.00
Four Pines Master Fund LP	231,875	—	\$148,500.00
Irving Investors, LLC	390,625	—	\$250,000.00

EXHIBIT B

Form of Pre-Funded Warrant



EXHIBIT C

Registration Rights Agreement



EXHIBIT D

Investor Questionnaire

REGISTRATION RIGHTS AGREEMENT

This REGISTRATION RIGHTS AGREEMENT (this “Agreement”) is made and entered into as of March 28, 2024 by and among Xilio Therapeutics, Inc., a Delaware corporation (the “Company”), and the “Investors” named in that certain Securities Purchase Agreement by and among the Company and the Investors, dated as of the date hereof (the “Purchase Agreement”). Capitalized terms used herein have the respective meanings ascribed thereto in the Purchase Agreement unless otherwise defined herein.

The parties hereby agree as follows:

1. Definitions.

As used in this Agreement, the following terms shall have the following meanings:

“Agreement” has the meaning set forth in the first paragraph.

“Allowed Delay” has the meaning set forth in Section 2(c)(ii).

“Company” has the meaning set forth in the first paragraph.

“Constructive Primary Offering” has the meaning set forth in Section 2(e).

“Cut Back Shares” has the meaning set forth in Section 2(e).

“Effectiveness Deadline” means, with respect to the Registration Statement, the sixtieth (60th) calendar day following the Filing Deadline (or, in the event the SEC reviews and has written comments to the Registration Statement, the one hundredth (100th) calendar day following the Filing Deadline); provided, however, that if the Effectiveness Deadline falls on a Saturday, Sunday or other day that the SEC is closed for business, the Effectiveness Deadline shall be extended to the next Business Day on which the SEC is open for business.

“Effectiveness Period” has the meaning set forth in Section 3(a).

“Filing Deadline” has the meaning set forth in Section 2(a)(i).

“Inspectors” has the meaning set forth in Section 3(k).

“Investors” means the Investors identified in the Purchase Agreement and any Affiliate or permitted transferee of any Investor who is a subsequent holder of Registrable Securities.

“Liquidated Damages” has the meaning set forth in Section 2(d)(ii).

“Losses” has the meaning set forth in Section 5(a).

“Maintenance Failure” has the meaning set forth in Section 2(d)(ii).

“Maintenance Liquidated Damages” has the meaning set forth in Section 2(d)(ii).

“Prospectus” means (a) the prospectus included in any Registration Statement, as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by such Registration Statement and by all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference in such prospectus, and (b) any “free writing prospectus” as defined in Rule 405 under the 1933 Act.

“Purchase Agreement” has the meaning set forth in the first paragraph.

“Qualification Date” has the meaning set forth in Section 2(a)(ii).

“Qualification Deadline” has the meaning set forth in Section 2(a)(ii).

“Questionnaire” has the meaning set forth in Section 4(a).

“Records” has the meaning set forth in Section 3(k).

“Register,” “registered” and “registration” refer to a registration made by preparing and filing a Registration Statement or similar document in compliance with the 1933 Act, and the declaration or ordering of effectiveness of such Registration Statement or document.

“Registrable Securities” means (a) the Shares, (b) the Warrant Shares and (c) any other securities issued or issuable with respect to or in exchange for Shares or Warrant Shares, whether by merger, charter amendment or otherwise; provided, that a security shall cease to be a Registrable Security upon the earliest of: (i) sale pursuant to a Registration Statement or Rule 144 under the 1933 Act, (ii) such security becoming eligible for sale without restriction by the Investor holding such security pursuant to Rule 144, including without any manner of sale or volume limitations, and without the requirement to be in compliance with Rule 144(c)(1) (or any successor thereto) promulgated under the 1933 Act or (iii) five years after the Closing Date.

“Registration Liquidated Damages” has the meaning set forth in Section 2(d)(i).

“Registration Statement” means any registration statement of the Company under the 1933 Act that covers the resale of any of the Registrable Securities pursuant to the provisions of this Agreement, amendments and supplements to such Registration Statement, including post-effective amendments, all exhibits and all material incorporated by reference in such Registration Statement.

“Required Investors” means the Investors holding a majority of the Registrable Securities outstanding from time to time.

“Restriction Termination Date” has the meaning set forth in Section 2(e).

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

“SEC Restrictions” has the meaning set forth in Section 2(e).

“Shelf Registration Statement” has the meaning set forth in Section 2(a)(ii).

2. Registration.

(a) Registration Statements.

(i) Promptly following the Closing Date but no later than thirty (30) days after the Closing Date (the “Filing Deadline”), the Company shall prepare and file with the SEC one Registration Statement covering the resale of all of the Registrable Securities. Subject to any SEC comments, such Registration Statement shall include the plan of distribution, substantially in the form and substance attached hereto as Exhibit A; provided, however, that no Investor shall be named as an “underwriter” in such Registration Statement without the Investor’s prior written consent. Such Registration Statement also shall cover, to the extent allowable under the 1933 Act and the rules promulgated thereunder (including Rule 416), such indeterminate number of additional shares of Common Stock resulting from stock splits, stock dividends or similar transactions with respect to the Registrable Securities. Such Registration Statement shall not include any shares of Common Stock or other securities for the account of any other holder of securities of the Company without the prior written consent of the Required Investors. Such Registration Statement (and each amendment or supplement thereto, and each request for acceleration of effectiveness thereof) shall be provided in accordance with Section 3(c) to the Investors prior to its filing or other submission.

(ii) The Registration Statement referred to in Section 2(a)(i) shall be on Form S-3. In the event that Form S-3 is not available for the registration of the resale of Registrable Securities hereunder, the Company shall (A) register the resale of the Registrable Securities on such other form as is available to the Company and (B) so long as Registrable Securities remain outstanding, promptly following the date (the “Qualification Date”) upon which the Company becomes eligible to use a registration statement on Form S-3 to register the Registrable Securities for resale, but in no event more than thirty (30) days after the Qualification Date (the “Qualification Deadline”), file a registration statement on Form S-3 covering the Registrable Securities (or a post-effective amendment on Form S-3 to a registration statement on Form S-1) (a “Shelf Registration Statement”) and use commercially reasonable efforts to cause such Shelf Registration Statement to be declared effective as promptly as practicable thereafter; provided that the Company shall maintain the effectiveness of the Registration Statement then in effect until such time as a Shelf Registration Statement covering the Registrable Securities has been declared effective by the SEC.

(b) Expenses. The Company will pay all expenses associated with each Registration Statement, including filing and printing fees, the Company’s counsel and accounting fees and expenses, costs associated with clearing the Registrable Securities for sale under applicable state securities laws and listing fees, but excluding discounts, commissions, fees of underwriters, selling brokers, dealer managers or similar securities industry professionals with respect to the Registrable Securities being sold.

(c) Effectiveness.

(i) The Company shall use commercially reasonable efforts to have each Registration Statement declared effective as soon as reasonably practicable after such Registration Statement has been filed with the SEC, but no later than the Effectiveness Deadline. By 5:30 p.m. (Eastern time) on the second Business Day following the date on which the Registration Statement is declared effective by the SEC, the Company shall file with the SEC, in accordance with Rule 424 under the 1933 Act, the final prospectus to be used in connection with sales pursuant to such Registration Statement. The Company shall notify the Investors by e-mail as promptly as practicable, and in any event within twenty-four (24) hours, after any Registration Statement is declared effective and shall simultaneously provide the Investors with copies of any related Prospectus to be used in connection with the sale or other disposition of the securities covered thereby.

(ii) For not more than thirty (30) consecutive days or for a total of not more than sixty (60) days in any twelve (12) month period, the Company may, on no more than two occasions, suspend the use of any Prospectus included in any Registration Statement contemplated by this Section 2 in the event that the Company determines in good faith that such suspension is necessary to (A) delay the disclosure of material nonpublic information concerning the Company, the disclosure of which at the time is not, in the good faith opinion of the Company, in the best interests of the Company or (B) amend or supplement the affected Registration Statement or the related Prospectus so that such Registration Statement or Prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the case of the Prospectus in light of the circumstances under which they were made, not misleading (an “Allowed Delay”); provided, that the Company shall promptly (1) notify each Investor in writing of the commencement of an Allowed Delay, but shall not (without the prior written consent of an Investor) disclose to such Investor any material nonpublic information giving rise to an Allowed Delay, (2) advise the Investors in writing to cease all sales under such Registration Statement until the end of the Allowed Delay and (3) use commercially reasonable efforts to terminate an Allowed Delay as promptly as practicable.

(d) Effect of Failure to File and Obtain and Maintain Effectiveness of Registration Statement.

(i) If a Registration Statement covering the Registrable Securities is not filed with the SEC on or prior to the Filing Deadline, the Company will make pro rata payments to each Investor then holding Registrable Securities, as liquidated damages and not as a penalty (the “Registration Liquidated Damages”), in an amount equal to one percent (1.0%) of the aggregate amount invested by such Investor for the initial day of failure to file such Registration Statement by the Filing Deadline and for each subsequent 30-day period (pro rata for any portion thereof) thereafter during which no such Registration Statement is filed with respect to the Registrable

Securities. Such payments shall be made to each Investor then holding Registrable Securities in cash no later than ten (10) Business Days after the end of the date of the initial failure to file such Registration Statement by the Filing Deadline and each subsequent 30-day period (pro rata for any portion thereof) thereafter until such Registration Statement is filed with respect to the Registrable Securities. Interest shall accrue at the rate of one percent (1.0%) per month on any such liquidated damages payments that shall not be paid by the applicable payment date until such amount is paid in full.

(ii) If (A) a Registration Statement covering the Registrable Securities is not declared effective by the SEC prior to the earlier of (1) five (5) Business Days after the SEC informs the Company that no review of such Registration Statement will be made or that the SEC has no further comments on such Registration Statement or (2) the Effectiveness Deadline or (B) after a Registration Statement has been declared effective by the SEC or otherwise becomes effective, sales cannot be made pursuant to such Registration Statement for any reason (including, without limitation, by reason of a stop order or the Company's failure to update such Registration Statement), but excluding any Allowed Delay or the inability of any Investor to sell the Registrable Securities covered thereby due to market conditions (each of (A) and (B), a "Maintenance Failure"), then the Company will make pro rata payments to each Investor then holding Registrable Securities, as liquidated damages and not as a penalty (the "Maintenance Liquidated Damages" and together with the Registration Liquidated Damages, the "Liquidated Damages"), in an amount equal to one percent (1.0%) of the aggregate amount invested by such Investor for the Registrable Securities then held by such Investor for the initial day of a Maintenance Failure and for each 30-day period (pro rata for any portion thereof) thereafter until the Maintenance Failure is cured. The Maintenance Liquidated Damages shall be paid monthly within ten (10) Business Days of the date of such Maintenance Failure and the end of each subsequent 30-day period (pro rata for any portion thereof) thereafter until the Maintenance Failure is cured. Such payments shall be made to each Investor then holding Registrable Securities in cash. Interest shall accrue at the rate of one percent (1.0%) per month on any such liquidated damages payments that shall not be paid by the applicable payment date until such amount is paid in full.

(iii) The parties agree that (A) notwithstanding anything to the contrary herein or in the Purchase Agreement, no Liquidated Damages shall be payable with respect to any period after the expiration of the Effectiveness Period (as defined below) (it being understood that this sentence shall not relieve the Company of any Liquidated Damages accruing prior to the expiration of the Effectiveness Period), and in no event shall the aggregate amount of Liquidated Damages payable to an Investor exceed, in the aggregate, three percent (3.0%) of the aggregate purchase price paid by such Investor pursuant to the Purchase Agreement and (B) in no event shall the Company be liable in any thirty (30) day period for Liquidated Damages under this Agreement in excess of one percent (1.0%) of the aggregate purchase price paid by the Investors pursuant to the Purchase Agreement.

(iv) Notwithstanding the foregoing, the Company and the Investors agree that the Company will not be liable for any Liquidated Damages under this Section 2(d) with respect to any Registrable Securities prior to their issuance. The Liquidated Damages described in this Section 2(d) shall constitute the Investors' exclusive monetary remedy for any failure to meet the Filing Deadline and for any Maintenance Failure, but shall not affect the right of the Investors to seek injunctive relief.

(e) Rule 415; Cutback. If at any time the SEC takes the position that the offering of some or all of the Registrable Securities in a Registration Statement is a primary offering or not eligible to be made on a delayed or continuous basis under the provisions of Rule 415 under the 1933 Act, or requires any Investor to be named as an "underwriter," the Company shall use commercially reasonable efforts to advocate before the SEC its reasonable position that the offering contemplated by such Registration Statement is a valid secondary offering and not an offering "by or on behalf of the issuer" as defined in Rule 415 (a "Constructive Primary Offering") and that none of the Investors is an "underwriter." The Investors shall have the right to select one legal counsel to review and oversee any registration or matters pursuant to this Section 2(e), including participation in any meetings or discussions with the SEC regarding the SEC's position and to comment on any written submission made to the SEC with respect thereto, which counsel shall be designated by the Required Investors. In the event that, despite the Company's commercially reasonable efforts, the SEC does not alter its position, the Company shall (i) remove from such Registration Statement such portion of the Registrable Securities (the "Cut Back Shares") and/or (ii) agree to such restrictions and limitations on the registration and resale of the Registrable Securities as the SEC may require to

assure the Company's compliance with the requirements of Rule 415 (collectively, the "SEC Restrictions"); provided, however, that the Company shall not agree to name any Investor as an "underwriter" in such Registration Statement without the prior written consent of such Investor. Any cut-back imposed on the Investors pursuant to this Section 2(e) shall be allocated among the Investors on a pro rata basis and shall be applied first to any of the Registrable Securities of such Investor as such Investor shall designate, unless the SEC Restrictions otherwise require or provide or the Investors otherwise agree. The parties agree that the Company's delay or failure to have a Registration Statement declared effective due to the SEC taking the position that the offering is a Constructive Primary Offering shall not be a breach of any provision of this Agreement and no liquidated damages shall accrue as to any Cut Back Shares. From and after such date as the Company is able to effect the registration of such Cut Back Shares in accordance with any SEC Restrictions applicable to such Cut Back Shares (such date, the "Restriction Termination Date"), all of the provisions of this Section 2 (including the Company's obligations with respect to the filing of a Registration Statement and its obligations to use commercially reasonable efforts to have such Registration Statement declared effective within the time periods set forth herein and the liquidated damages provisions relating thereto) shall again be applicable to such Cut Back Shares; provided, however, that (i) the Filing Deadline and/or the Qualification Deadline, as applicable, for such Registration Statement including such Cut Back Shares shall be ten (10) Business Days after such Restriction Termination Date, and (ii) the date by which the Company is required to obtain effectiveness with respect to such Cut Back Shares under Section 2(c) shall be the 75th day immediately after the Restriction Termination Date (or the 120th day if the SEC reviews such Registration Statement).

3. Company Obligations. The Company will use commercially reasonable efforts to effect the registration of the Registrable Securities in accordance with the terms hereof and will, as expeditiously as possible:

(a) use commercially reasonable efforts to cause such Registration Statement to become effective and to remain continuously effective for a period that will terminate upon the earlier of (i) the date on which all Registrable Securities covered by such Registration Statement, as amended from time to time, have been sold, and (ii) the date on which all Shares and Warrant Shares cease to be Registrable Securities (the "Effectiveness Period");

(b) prepare and file with the SEC such amendments and post-effective amendments to such Registration Statement and the related Prospectus as may be necessary to keep such Registration Statement effective for the Effectiveness Period and to comply with the provisions of the 1933 Act and the 1934 Act with respect to the distribution of all of the Registrable Securities covered thereby;

(c) provide copies to and permit each Investor to review each Registration Statement and all amendments and supplements thereto prior to their filing with the SEC and a reasonable opportunity to furnish reasonable comments thereon;

(d) furnish to each Investor whose Registrable Securities are included in any Registration Statement (i) promptly after the same is prepared and filed with the SEC, if requested by the Investor, one (1) copy of any Registration Statement and any amendment thereto, each preliminary Prospectus and Prospectus and each amendment or supplement thereto, and each letter written by or on behalf of the Company to the SEC or the staff of the SEC, and each item of correspondence from the SEC or the staff of the SEC, in each case relating to such Registration Statement (other than any portion thereof which contains information for which the Company has sought confidential treatment), and (ii) such number of copies of a Prospectus, including a preliminary Prospectus, and all amendments and supplements thereto and such other documents as each Investor may reasonably request in order to facilitate the disposition of the Registrable Securities owned by such Investor that are covered by such Registration Statement;

(e) use commercially reasonable efforts to (i) prevent the issuance of any stop order or other suspension of effectiveness and, (ii) if such order is issued, obtain the withdrawal of any such order at the earliest practical moment;

(f) use commercially reasonable efforts to cause all Registrable Securities covered by a Registration Statement to be listed on The Nasdaq Global Select Market (or the primary securities exchange, interdealer quotation system or other market on which similar securities issued by the Company are then listed);

(g) promptly notify the Investors, at any time prior to the end of the Effectiveness Period, upon discovery that, or upon the happening of any event as a result of which, the Prospectus includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing (provided that such notice shall not, without the prior written consent of an Investor, disclose to such Investor any material nonpublic information regarding the Company), and promptly prepare, file with the SEC and furnish to such holder a supplement to or an amendment of such Prospectus as may be necessary so that such Prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing;

(h) otherwise use commercially reasonable efforts to comply with all applicable rules and regulations of the SEC under the 1933 Act and the 1934 Act, including, without limitation, Rule 172 under the 1933 Act, file any final Prospectus, including any supplement or amendment thereof, with the SEC pursuant to Rule 424 under the 1933 Act, promptly inform the Investors in writing if, at any time during the Effectiveness Period, the Company does not satisfy the conditions specified in Rule 172 and, as a result thereof, the Investors are required to deliver a Prospectus in connection with any disposition of Registrable Securities and take such other actions as may be reasonably necessary to facilitate the registration of the Registrable Securities hereunder; and make available to its security holders, as soon as reasonably practicable, an earnings statement satisfying the provisions of Section 11(a) of the 1933 Act;

(i) if requested by an Investor, (i) as soon as reasonably practicable, incorporate in a prospectus supplement or post-effective amendment such information as an Investor reasonably requests to be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering; (ii) as soon as reasonably practicable, make all required filings of such prospectus supplement or post-effective amendment after being notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) as soon as reasonably practicable, supplement or make amendments to any Registration Statement if reasonably requested by an Investor holding any Registrable Securities;

(j) within two (2) Business Days after a Registration Statement which covers Registrable Securities is ordered effective by the SEC, deliver to the transfer agent for such Registrable Securities (with copies to the Investors whose Registrable Securities are included in such Registration Statement) confirmation that such Registration Statement has been declared effective by the SEC;

(k) make available upon reasonable prior notice during normal business hours and for reasonable periods for inspection by the Investors and by any attorney, accountant or other agent retained by the Investors and who is reasonably acceptable to the Company (collectively, the “Inspectors”), all pertinent financial and other records and pertinent corporate documents and properties of the Company (collectively, the “Records”) as may be reasonably necessary for the purpose of such review, and cause the Company’s officers, directors and employees and the independent public accountants who have certified its financial statements to make themselves available to discuss the business of the Company and to supply all information reasonably requested by the Inspectors for the sole purpose of conducting initial and ongoing due diligence with respect to the Company and the accuracy of the Registration Statement; provided, however, that each Investor shall agree to, and to direct its Inspectors to, hold in strict confidence and shall not make any disclosure or use of any Record or other information which the Company determines in good faith to be confidential, and of which determination the Inspectors are so notified, unless (a) the disclosure of such Records is necessary to avoid or correct a misstatement or omission in any Registration Statement or is otherwise required under the 1933 Act, (b) the release of such Records is ordered pursuant to a final, non-appealable subpoena or order from a court or government body of competent jurisdiction, or (c) the information in such Records has been made generally available to the public other than by disclosure in violation of this Section 3(k). Notwithstanding the foregoing, the Company shall not disclose material nonpublic information to the Investors, or to advisors to or representatives of the Investors, unless prior to the disclosure of such information the Company identifies such information as being material nonpublic information and provides the Investors, such advisors and such representatives with the opportunity to accept or refuse to accept such material nonpublic information for review and any Investor wishing to obtain such information enters into an appropriate confidentiality agreement with the Company with respect thereto; and

(l) with a view to making available to the Investors the benefits of Rule 144 (or its successor rule) and any other rule or regulation of the SEC that may at any time permit the Investors to sell shares of Common Stock to the public without registration, covenant and agree to: (i) make and keep adequate current public information available, as those terms are understood and defined in Rule 144, until the earlier of (A) six months after such date as all of the Registrable Securities may be sold without restriction by the holders thereof pursuant to Rule 144 or any other rule of similar effect or (B) such date as all of the Registrable Securities shall have been resold or shall have otherwise ceased to be Registerable Securities; (ii) file with the SEC in a timely manner all reports and other documents required of the Company under the 1934 Act; and (iii) furnish to each Investor upon request, as long as such Investor owns any Registrable Securities, (A) a written statement by the Company that it has complied with the reporting requirements of the 1934 Act, (B) a copy of the Company's most recent Annual Report on Form 10-K or Quarterly Report on Form 10-Q, and (C) such other information as may be reasonably requested in order to avail such Investor of any rule or regulation of the SEC that permits the selling of any such Registrable Securities without registration.

4. Obligations of the Investors.

(a) Notwithstanding any other provision of the Agreement, no Investor may include any of its Registrable Securities in the Registration Statement pursuant to this Agreement unless such Investor furnishes to the Company a completed questionnaire substantially in the form of Exhibit B (the "Questionnaire") for use in connection with the Registration Statement at least five (5) Business Days prior to the anticipated filing date of the Registration Statement if such Investor elects to have any of the Registrable Securities included in such Registration Statement. In addition to the Questionnaire, each Investor shall furnish such other information as shall be reasonably required to effect the registration of such Registrable Securities, and shall execute such documents in connection with such registration as the Company may reasonably request.

(b) Each Investor, by its acceptance of the Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of a Registration Statement hereunder, unless such Investor has notified the Company in writing of its election to exclude all of its Registrable Securities from such Registration Statement.

(c) Each Investor agrees that, upon receipt of any notice from the Company of either (i) the commencement of an Allowed Delay pursuant to Section 2(c)(ii) or (ii) the happening of an event pursuant to Section 3(g) hereof, such Investor will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement covering such Registrable Securities until the Investor is advised by the Company that such dispositions may again be made.

(d) Each Investor covenants and agrees that it will comply with the prospectus delivery requirements of the 1933 Act as applicable to it or an exemption therefrom in connection with sales of Registrable Securities pursuant to any Registration Statement.

5. Indemnification.

(a) Indemnification by the Company. The Company will indemnify and hold harmless each Investor and its officers, directors, members, employees and agents, and each other person, if any, who controls such Investor within the meaning of the 1933 Act, against any losses, claims, damages or liabilities (collectively, "Losses") and expenses (including reasonable attorney fees), joint or several, to which they may become subject under the 1933 Act or otherwise, insofar as such Losses (or actions in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement or omission or alleged omission of any material fact contained in any Registration Statement, any preliminary Prospectus or final Prospectus, or any amendment or supplement thereof or (ii) any violation or alleged violation by the Company or any of its subsidiaries of any federal, state, foreign or common law rule or regulation applicable to the Company or any of its subsidiaries and relating to action or inaction in connection with any such registration, disclosure document or other document or report, except to the extent that any such Losses arise out of or are based upon (A) an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by such Investor or any such controlling person in writing specifically for use in such Registration Statement or Prospectus; (B) the use by an Investor of an outdated or defective Prospectus after the Company has notified such Investor in writing that such Prospectus is outdated or

defective; or (C) an Investor's failure to send or give a copy of the Prospectus or supplement (as then amended or supplemented), if required (and not exempted) to the Persons asserting an untrue statement or omission or alleged untrue statement or omission at or prior to the written confirmation of the sale of Registrable Securities.

(b) Indemnification by the Investors. Each Investor agrees, severally but not jointly, to indemnify and hold harmless, to the fullest extent permitted by law, the Company, its directors, officers, employees, stockholders and each person who controls the Company (within the meaning of the 1933 Act) against any Losses and expenses (including reasonable attorney fees) resulting from any untrue statement of a material fact or any omission of a material fact required to be stated in any Registration Statement or Prospectus or preliminary Prospectus or amendment or supplement thereto or necessary to make the statements therein not misleading, to the extent, but only to the extent that such untrue statement or omission is contained in any information furnished in writing by such Investor, relating to such Investor, to the Company specifically for inclusion in such Registration Statement or Prospectus or amendment or supplement thereto. Except to the extent that any such Losses or expenses are finally judicially determined to have resulted from an Investor's bad faith, gross negligence, recklessness, fraud or willful misconduct, in no event shall the liability of an Investor be greater in amount than the dollar amount of the proceeds (net of all expenses paid by such Investor in connection with any claim relating to this Section 5 and the amount of any damages such Investor has otherwise been required to pay by reason of such untrue statement or omission) received by such Investor upon the sale of the Registrable Securities included in such Registration Statement giving rise to such indemnification obligation.

(c) Conduct of Indemnification Proceedings. Any person entitled to indemnification hereunder shall (i) give prompt written notice to the indemnifying party of any claim with respect to which it seeks indemnification and (ii) permit such indemnifying party to assume the defense of such claim with counsel reasonably satisfactory to the indemnified party; provided that any person entitled to indemnification hereunder shall have the right to employ separate counsel and to participate in the defense of such claim, but the fees and expenses of such counsel shall be at the expense of such person unless (A) the indemnifying party has agreed in writing to pay such fees or expenses, (B) the indemnifying party shall have failed to assume the defense of such claim and employ counsel reasonably satisfactory to such person or (C) in the reasonable judgment of any such person, based upon written advice of its counsel, a conflict of interest exists between such person and the indemnifying party with respect to such claims (in which case, if the person notifies the indemnifying party in writing that such person elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of such claim on behalf of such person); and provided, further, that the failure of any indemnified party to give written notice as provided herein shall not relieve the indemnifying party of its obligations hereunder, except to the extent that such failure to give notice shall materially adversely affect the indemnifying party in the defense of any such claim or litigation. It is understood that the indemnifying party shall not, in connection with any proceeding in the same jurisdiction, be liable for fees or expenses of more than one separate firm of attorneys at any time for all such indemnified parties. No indemnifying party will, except with the consent of the indemnified party, which shall not be unreasonably withheld or conditioned, consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect of such claim or litigation.

(d) Contribution. If for any reason the indemnification provided for in the preceding paragraphs (a) and (b) is unavailable to an indemnified party or insufficient to hold it harmless, other than as expressly specified therein, then the indemnifying party shall contribute to the amount paid or payable by the indemnified party as a result of such loss, claim, damage or liability in such proportion as is appropriate to reflect the relative fault of the indemnified party and the indemnifying party, as well as any other relevant equitable considerations. No person guilty of fraudulent misrepresentation within the meaning of Section 11(f) of the 1933 Act shall be entitled to contribution from any person not guilty of such fraudulent misrepresentation. Except to the extent that any such Losses are finally judicially determined to have resulted from a holder of Registrable Securities' bad faith, gross negligence, recklessness, fraud or willful misconduct, in no event shall the contribution obligation of an Investor be greater in amount than the dollar amount of the proceeds (net of all expenses paid by such Investor in connection with any claim relating to this Section 5 and the amount of any damages such Investor has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission) received by it upon the sale of the Registrable Securities giving rise to such contribution obligation.

6. Miscellaneous.

(a) Effective Date. This Agreement shall be effective as of the Closing. If, prior to the Closing, (i) the Purchase Agreement is terminated with respect to all parties thereto pursuant to Section 6.3 therein, then this Agreement shall be null and void, or (ii) any Investor (with respect to itself only) terminates its obligations under the Purchase Agreement pursuant to Section 6.3(a)(iii) therein, then such Investor's rights and obligations under this Agreement shall also be terminated, in each case, unless otherwise mutually agreed.

(b) Amendments and Waivers. This Agreement may be amended only by a writing signed by the Company and the Required Investors. The Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company shall have obtained the written consent to such amendment, action or omission to act of the Required Investors.

(c) Notices. All notices and other communications provided for or permitted hereunder shall be made as set forth in Section 9.4 of the Purchase Agreement.

(d) Assignments and Transfers by Investors. The provisions of this Agreement shall be binding upon and inure to the benefit of the Investors and their respective successors and assigns. An Investor may transfer or assign, in whole or from time to time in part, to one or more persons its rights hereunder in connection with the transfer of Registrable Securities by such Investor to such person, provided that such Investor complies with all laws applicable thereto, and the provisions of the Purchase Agreement, and provides written notice of assignment to the Company promptly after such assignment is effected, and such person agrees in writing to be bound by all of the provisions contained herein.

(e) Assignments and Transfers by the Company. This Agreement may not be assigned by the Company (whether by operation of law or otherwise) without the prior written consent of the Required Investors, provided, however, that in the event that the Company is a party to a merger, consolidation, share exchange or similar business combination transaction in which the Common Stock is converted into the equity securities of another Person, from and after the effective time of such transaction, such Person shall, by virtue of such transaction and without prior written consent of the Required Investors, be deemed to have assumed the obligations of the Company hereunder, the term "Company" shall be deemed to refer to such Person and the term "Registrable Securities" shall be deemed to include the securities received by the Investors in connection with such transaction unless such securities are otherwise freely tradable by the Investors after giving effect to such transaction.

(f) Benefits of the Agreement. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective permitted successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

(g) Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signatures complying with the U.S. federal E-SIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

(h) Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

(i) Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof but shall be interpreted as if it were written so as to be enforceable to the maximum extent permitted by applicable law, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by

applicable law, the parties hereby waive any provision of law which renders any provisions hereof prohibited or unenforceable in any respect.

(j) Further Assurances. The parties shall execute and deliver all such further instruments and documents and take all such other actions as may reasonably be required to carry out the transactions contemplated hereby and to evidence the fulfillment of the agreements herein contained.

(k) Entire Agreement. This Agreement is intended by the parties as a final expression of their agreement and intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of the subject matter contained herein. This Agreement supersedes all prior agreements and understandings between the parties with respect to such subject matter.

(l) Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware. Service of process in connection with any such suit, action or proceeding may be served on each party hereto anywhere in the world by the same methods as are specified for the giving of notices under this Agreement.

(m) Cumulative Remedies. The remedies provided herein are cumulative and not exclusive of any remedies provided by law.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have executed this Agreement or caused their duly authorized officers to execute this Agreement as of the date first above written.

COMPANY:

XILIO THERAPEUTICS, INC.

By: /s/ René Russo

Name: René Russo

Title: President and Chief Executive Officer

[Signature Page to Registration Rights Agreement]

INVESTOR:

BCLS II Equity Opportunities, LP

By: BCLS II Equity Opportunities GP, LLC,
its general partner

By: Bain Capital Life Sciences Fund II, L.P.,
its general partner

By: Bain Capital Life Sciences Investors II, LLC,
its general partner

By: Bain Capital Life Sciences Investors, LLC,
its general partner

By: /s/ Andrew Hack

Name: Andrew Hack

Title: Partner

[Signature Page to Registration Rights Agreement]

INVESTOR:

Rock Springs Capital Master Fund LP

By: Rock Springs General Partner LLC,
its general partner

By: /s/ Kris Jenner

Name: Kris Jenner

Title: Member

Address: [**]

Email: [**]

[Signature Page to Registration Rights Agreement]

INVESTOR:

Four Pines Master Fund LP

By: Four Pines General Partner LLC,
its general partner

By: /s/ Kris Jenner

Name: Kris Jenner

Title: Member

Address: [**]

Email: [**]

[Signature Page to Registration Rights Agreement]

INVESTOR:

Irving Investors, LLC

By: /s/ Jeremy Abelson

Name: Jeremy Abelson

Title: Authorized Signatory

Address: [**]

Email: [**]

[Signature Page to Registration Rights Agreement]

EXHIBIT A

Plan of Distribution

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, as amended (the “Securities Act”), amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees, donees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the pre-funded warrants by payment of cash, however, we will receive the exercise price of the pre-funded warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are deemed “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Securities Exchange Act of 1934, as amended, may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to use commercially reasonable efforts to cause the registration statement of which this prospectus constitutes a part effective and to remain continuously effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with such registration statement or (2) the date on which all of the shares may be sold without restriction pursuant to Rule 144 of the Securities Act.

EXHIBIT B

Form of Selling Stockholder Questionnaire

XILIO THERAPEUTICS, INC.

SELLING STOCKHOLDER QUESTIONNAIRE

Reference is made to that certain registration rights agreement (the “Registration Rights Agreement”), dated as of March 28, 2024, by and among Xilio Therapeutics, Inc. (the “Company”) and the parties named therein. Capitalized terms used and not defined herein shall have the meanings given to such terms in the Registration Rights Agreement.

The undersigned holder of Registrable Securities (the “undersigned” or the “Selling Stockholder”) is providing this Selling Stockholder Questionnaire pursuant to Section 4(a) of the Registration Rights Agreement. The undersigned, by signing and returning this Selling Stockholder Questionnaire, understands that it will be bound by the terms and conditions of this Selling Stockholder Questionnaire and the Registration Rights Agreement. The undersigned hereby acknowledges its indemnity obligations pursuant to Section 5(b) of the Registration Rights Agreement.

The undersigned further acknowledges that the Company intends to use the information set forth below in preparing a resale registration statement (the “Resale Registration Statement”) relating to the Registrable Securities. The undersigned understands that failure to provide the requested information may result in the Company’s exclusion of the undersigned Registrable Securities from the Resale Registration Statement.

The undersigned provides the following information to the Company and represents and warrants that such information is accurate and complete:

PART A. BACKGROUND INFORMATION

(1) (a) Full Legal Name of the Selling Stockholder:

(b) Full Legal Name of Registered Holder (if not the same as (a) above) through which Registrable Securities listed in (3) below are held:

(c) Full Legal Name of DTC Participant (if applicable and if not the same as (b) above) through which Registrable Securities listed in (3) below are held:

(2) Address for Notices to the Selling Stockholder:

Telephone: _____

Contact Person: _____



(3) Beneficial Ownership of Registrable Securities (the securities being purchased pursuant to the Purchase Agreement):

(a) Type and Principal Amount/Number of Registrable Securities beneficially owned:

(b) CUSIP No(s). of such Registrable Securities beneficially owned:

(4) Beneficial Ownership of Other Securities of the Company Owned by the Selling Stockholder:

Except as set forth below in this Item (4), the Selling Stockholder is not the beneficial or registered owner of any securities of the Company other than the Registrable Securities listed above in Item (3).

(a) Type and Amount of Other Securities beneficially owned by the Selling Stockholder:

(b) CUSIP No(s). of such Other Securities beneficially owned:

PART B. RESALE REGISTRATION STATEMENT QUESTIONS

1. Affiliation with Broker-Dealers: Is the undersigned a registered broker-dealer or an affiliate of a registered broker-dealer? For purposes of this question, an "affiliate" of a specified person or entity means a person or entity that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the person or entity specified.

Yes _____ No _____

If "Yes", please answer the remaining questions in this section.

Please identify the registered broker-dealer(s) and describe the nature of the affiliation(s) between the undersigned and such registered broker-dealers:

2. If the Registrable Securities are being purchased by you other than in the ordinary course of business, please describe the circumstances:

3. If you, at the time of purchasing the Registrable Securities, will have any agreements or understandings, directly or indirectly, with any person to distribute the Registrable Securities, please describe such agreements or understandings:



4. Relationship with the Company:

(A) Have you or any of your affiliates, officers, directors or principal equity holders (owners of 5% or more of the equity securities of the undersigned) held any position or office or have you had any other material relationship with the Company (or its predecessors or affiliates) within the past three years?

Yes _____ No _____

(B) If so, please state the nature and duration of your relationship with the Company:

5. Plan of Distribution: Except as set forth below, the undersigned intends to distribute its Registrable Securities pursuant to the Resale Registration Statement in accordance with the "Plan of Distribution" that will be included therein, a copy of which is attached as Exhibit A to the Registration Rights Agreement by and among the Company and the Investors:

State any exceptions here:

6. Potential Nature of Beneficial Holding: The purpose of this question is to identify the ultimate natural person(s) or publicly held entity that will exercise(s) sole or shared voting or dispositive power over the Registrable Securities.

(A) Is the undersigned required to file, or is it a wholly-owned subsidiary of a company that is required to file, periodic and other reports (for example, Forms 10-K, 10-Q, 8-K) with the Securities and Exchange Commission (the "SEC") pursuant to section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")?

Yes _____ No _____

(B) State whether the undersigned is a subsidiary of an investment company, registered under the Investment Company Act of 1940:

Yes _____ No _____

If a subsidiary, please identify the publicly-held parent entity:

If you answered "Yes" to these two questions (Part B, clauses 6(A) and (B)), you may skip the next question and proceed to the signature page of this Questionnaire.



(C) Please identify the controlling person(s) of the undersigned (the “Controlling Entity”). If the Controlling Entity is not a natural person or a publicly held entity, please identify each controlling person(s) of such Controlling Entity. This process should be repeated until you reach natural persons or a publicly held entity that will exercise sole or shared voting or dispositive power over the Registrable Securities:

Please find below an example of the requested natural person disclosure:

The securities will be held by [VC Fund I] and [VC Fund II]. The [sole general partner] of [VC Fund I] and [VC Fund II] is [VC Management LLC]. The [managers] of [VC Management LLC] are [John Smith] and [Jane Doe]. These individuals may be deemed to have shared voting and investment power of the securities held by [VC Fund I] and [VC Fund II]. Each of these individuals will disclaim beneficial ownership of such securities, except to the extent of his or her pecuniary interest therein.

(D) Please provide contact information for all controlling persons and Controlling Entities identified in Part B, clause 6(C) above:

Name of controlling person or Controlling Entity (including contact person for Controlling Entities)	Mailing Address	E-Mail Address	Telephone Number

The Company hereby advises the Investor that the SEC currently takes the position that coverage of Short Sales (as defined in the Purchase Agreement) of shares of common stock “against the box” prior to effectiveness of a resale registration statement with securities included in such registration statement would be a violation of Section 5 of the Securities Act, as set forth in Item 239.10 of the Securities Act Rules Compliance and Disclosure Interpretations compiled by the Office of Chief Counsel, Division of Corporation Finance.

If you need more space for any response, please attach additional sheets of paper. Please be sure to indicate your name and the number of the item being responded to on each such additional sheet of paper, and to sign each such additional sheet of paper before attaching it to this Questionnaire. Please note that you may be asked to answer additional questions depending on your responses to the above questions.

Certain legal consequences arise from being named as a selling stockholder in the Resale Registration Statement and the related prospectus. Accordingly, holders and beneficial owners of Registrable Securities are advised to consult their own securities law counsel regarding the consequences of being named or not being named as a selling stockholder in the Resale Registration Statement and the related prospectus.

By signing below, the undersigned elects to include the Registrable Securities owned by it in the Registration Statement and consents to the disclosure of the information contained herein and the inclusion of such information in the Resale Registration Statement, any amendments thereto and the related prospectus or other filings with the SEC. The undersigned understands that such information will be relied upon by the Company in connection with the preparation or amendment of the Resale Registration Statement and the related prospectus.

The Selling Stockholder acknowledges that it understands its obligations to comply with the provisions of the Exchange Act, and the rules thereunder relating to stock manipulation, particularly Regulation M thereunder (or any successor rules or regulations), in connection with any offering of Registrable Securities pursuant to the Resale Registration Agreement. The Selling Stockholder agrees that neither it nor any person acting on its behalf will engage in any transaction in violation of such provisions.

The undersigned agrees to notify the Company immediately of any changes in the foregoing information and to furnish any supplementary information that may be appropriate.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has executed this Questionnaire this ____ day of _____, 2024, and declares that it is truthful and correct.

A. FOR EXECUTION BY AN ENTITY:

Entity Name: _____

By: _____

_____ Date

Print Name: _____

Title: _____

B. ADDITIONAL SIGNATURES (if required by partnership, corporation or trust document):

Entity Name: _____

By: _____

_____ Date

Print Name: _____

Title: _____

Entity Name: _____

By: _____

_____ Date

Print Name: _____

Title: _____

C. FOR EXECUTION BY AN INDIVIDUAL:

By: _____

_____ Date

Print Name: _____



CONTACTS

Xilio Info

Investors: Melissa Forst
Argot Partners
Xilio@argotpartners.com

Media: Dan Budwick
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Gilead Info

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**GILEAD AND XILIO ANNOUNCE EXCLUSIVE LICENSE AGREEMENT
FOR TUMOR-ACTIVATED IL-12 PROGRAM**

*-- Gilead Granted Exclusive License to Xilio's Tumor-Activated IL-12 Program, Including XTX301, a
Clinical-Stage IL-12 Molecule with Potential to Treat a Broad Range of Cancers --*

FOSTER CITY, Calif. and WALTHAM, Mass., March 28, 2024 – Gilead Sciences, Inc. (Nasdaq: GILD) and Xilio Therapeutics, Inc. (Nasdaq: XLO) today announced an exclusive license agreement to develop and commercialize Xilio's Phase 1 tumor-activated IL-12 program, XTX301.

Xilio Therapeutics is a clinical-stage biotechnology company discovering and developing tumor-activated immuno-oncology therapies. The company is using its proprietary tumor-activation platform to build a pipeline of novel, tumor-activated molecules, including antibodies, cytokines, bispecifics, and cell engagers, which are designed to optimize the therapeutic index and localize anti-tumor activity within the tumor microenvironment. XTX301 is currently being evaluated in a Phase 1 dose escalation trial in patients with advanced solid tumors.

"Xilio's novel tumor-activation platform naturally complements Gilead's clinical development program in difficult-to-treat cancers and expands our focus in immuno-oncology," said Bill Grossman, MD, PhD, Senior Vice President, Oncology Clinical Development, Gilead Sciences. "We believe IL-12 has the potential to treat a broad range of tumor types and are excited to partner with Xilio to advance XTX301, a tumor-activated IL-12, as a monotherapy and a combination therapy across a variety of solid tumors."

"Gilead's confidence in our tumor-activated technology, combined with their deep expertise in developing and commercializing novel immuno-oncology products, will enable us to accelerate and expand the development of XTX301, our tumor-activated IL-12," said René Russo, Pharm.D., President and Chief Executive Officer of Xilio. "We look forward to collaborating with Gilead as we seek to deliver on the potential for XTX301 to provide a meaningful benefit for a range of tumor types, including immunologically cold tumors, while overcoming the severe toxicities historically associated with IL-12."

Terms of the Agreement

Under the terms of the agreement, Xilio granted Gilead an exclusive global license to develop and commercialize XTX301, Xilio's tumor-activated IL-12. Xilio will receive \$43.5 million in upfront payments, including a cash payment of \$30.0 million and an initial equity investment by Gilead of \$13.5 million in Xilio common stock at a premium. Xilio will be eligible to receive up to \$604.0 million in additional contingent payments, including additional equity investments by Gilead, a transition fee and specified development, regulatory and sales-based milestones. Xilio will also be eligible to receive tiered royalties ranging from high single digits to mid-teens on annual global net product sales.

Xilio will be responsible for conducting clinical development of XTX301 in the ongoing Phase 1 clinical trial through dose expansion. Following the delivery by Xilio of a specified clinical data package for XTX301, Gilead can elect to transition responsibilities for the development and commercialization of XTX301 to Gilead, subject to the terms of the agreement and payment by Gilead of a \$75 million transition fee. Prior to the potential transition fee, Xilio is eligible to receive up to a total of \$29.0 million in additional equity investments and a development milestone payment.

Gilead does not exclude acquired IPR&D expenses from its non-GAAP financial measures. This transaction is expected to reduce Gilead's GAAP and non-GAAP 2024 EPS by approximately \$0.03 – \$0.04.

About XTX301 (IL-12) and the Phase 1 Clinical Trial

XTX301 is an investigational tumor-activated IL-12 designed to potently stimulate anti-tumor immunity and reprogram the tumor microenvironment (TME) of poorly immunogenic "cold" tumors towards an inflamed or "hot" state. Xilio is currently evaluating the safety and tolerability of XTX301 as a monotherapy in patients with advanced solid tumors in a first-in-human, multi-center, open-label Phase 1 clinical trial. Please refer to NCT05684965 on www.clinicaltrials.gov for additional details.

About Xilio Therapeutics

Xilio Therapeutics is a clinical-stage biotechnology company discovering and developing tumor-activated immuno-oncology (I-O) therapies with the goal of significantly improving outcomes for people living with cancer without the systemic side effects of current I-O treatments. The company is using its proprietary platform to build a pipeline of novel, tumor-activated molecules, including antibodies, cytokines, bispecifics and cell engagers, which are designed to optimize the therapeutic index and localize anti-tumor activity within the tumor microenvironment. Xilio is currently advancing multiple programs for tumor-activated I-O treatments in clinical development, as well as leveraging its differentiated research platform to advance tumor-activated bispecific and cell engager molecules in preclinical development. Learn more by visiting www.xiliotx.com and follow us on LinkedIn (Xilio Therapeutics, Inc.).

About Gilead Sciences

Gilead Sciences, Inc. is a biopharmaceutical company that has pursued and achieved breakthroughs in medicine for more than three decades, with the goal of creating a healthier world for all people. The company is committed to advancing innovative medicines to prevent and treat life-threatening diseases, including HIV, viral hepatitis, COVID-19, and cancer. Gilead operates in more than 35 countries worldwide, with headquarters in Foster City, California.

Xilio Therapeutics Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, statements regarding the amount of proceeds expected from the transactions with Gilead; the timing and certainty of completion of the transactions with Gilead; the potential benefits of any of Xilio's current or future product candidates in treating patients as a monotherapy or combination therapy; the potential for Xilio to leverage its research platform to develop bispecific or cell engager molecules; the period in which Xilio expects to have cash to fund its operations; and Xilio's strategy, goals and anticipated financial performance, milestones, business plans and focus. The words "aim," "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "seek," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of important risks, uncertainties and other factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, general market conditions; whether the conditions for the closing of the transactions with Gilead will be satisfied; risks and uncertainties related to ongoing and planned research and development activities, including initiating, conducting or completing preclinical studies and clinical trials and the timing and results of such preclinical studies or clinical trials; the delay of any current or planned preclinical studies or clinical trials or the development of Xilio's current or future product candidates; Xilio's ability to obtain and maintain sufficient preclinical and clinical supply of current or future product candidates; Xilio's advancement of multiple early-stage programs; interim or preliminary preclinical or clinical data or results, which may not be replicated in or predictive of future preclinical or clinical data or results; Xilio's ability to successfully demonstrate the safety and efficacy of its product candidates and gain approval of its product candidates on a timely basis, if at all; results from preclinical studies or clinical trials for Xilio's product candidates, which may not support further development of such product candidates; actions of regulatory agencies, which may affect the initiation, timing and progress of current or future clinical trials; Xilio's ability to obtain, maintain and enforce patent and other intellectual property protection for current or future product candidates; Xilio's ability to obtain and maintain sufficient cash resources to fund its operations; the impact of international trade policies on Xilio's business, including U.S. and China trade policies; Xilio's ability to maintain its clinical trial collaboration with Roche to develop XTX101 in combination with atezolizumab; and Xilio's ability to maintain its license and collaboration agreement with Gilead to develop and commercialize XTX301. These and other risks and uncertainties are described in greater detail in the sections entitled "Risk Factor Summary" and "Risk Factors" in Xilio's filings with the U.S. Securities and Exchange Commission (SEC), including Xilio's most recent Quarterly Report on Form 10-Q and any other filings that Xilio has made or may make with the SEC in the future. Any forward-looking statements contained in this press release represent Xilio's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. Except as required by law, Xilio explicitly disclaims any obligation to update any forward-looking statements.

This press release contains hyperlinks to information that is not deemed to be incorporated by reference in this press release.

Gilead Forward-Looking Statements

This press release includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks, uncertainties and other factors, including Gilead's ability to realize the anticipated benefits from the collaboration with Xilio; difficulties or unanticipated expenses in connection with the collaboration, and the potential effects on Gilead's earnings; the risk that Gilead's investment in Xilio will lose value for any number of reasons; the ability of the parties to initiate, progress or complete clinical trials within currently anticipated timelines or at all, and the possibility of unfavorable results from trials, including those involving XTX301, and additional programs that may become subject of the collaboration; the ability of the parties to file applications for regulatory approval or receive regulatory approvals in a timely manner or at all for the investigational programs developed pursuant to the collaborations, and the risk that any such approvals may be subject to significant limitations on use; the possibility that the parties may make a strategic decision to terminate the collaboration or discontinue development of any of the investigational programs subject to the collaboration, and therefore these investigational programs may never be successfully commercialized; and any assumptions underlying any of the foregoing. These and other risks, uncertainties and other factors are described in detail in Gilead's Annual Report on Form 10-K for the year ended December 31, 2023, as filed with the U.S. Securities and Exchange Commission. These risks, uncertainties and other factors could cause actual results to differ materially from those referred to in the forward-looking statements. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. The reader is cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties and is cautioned not to place undue reliance on these forward-looking statements. All forward-looking statements are based on information currently available to Gilead, and Gilead assumes no obligation and disclaims any intent to update any such forward-looking statements.

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Gilead and the Gilead logo are trademarks of Gilead Sciences, Inc., or its related companies. Xilio and the Xilio logo are trademarks of Xilio Therapeutics, Inc. or its related companies.

For more information about Gilead, please visit the company's website at www.gilead.com, follow Gilead on X/Twitter (@Gilead Sciences) and LinkedIn (@Gilead-Sciences).

Xilio Therapeutics Announces \$11.3 Million Private Placement Equity Financing

Announces strategic portfolio reprioritization focused on rapid advancement of clinical-stage programs for XTX301, a tumor-activated, IL-12, and XTX101, a tumor-activated, Fc-enhanced anti-CTLA-4, and leveraging the company's promising research platform for tumor-activated bispecific and cell engager molecules

Reports additional Phase 2 data for XTX202, a tumor-activated, beta-gamma biased IL-2, supporting potential as combination therapy; plans to discontinue monotherapy development and evaluate collaboration opportunities to advance development

Anticipates cash runway into Q2 2025

Xilio to host conference call today at 8:00 a.m. ET

WALTHAM, Mass., March 28, 2024 –Xilio Therapeutics, Inc. (Nasdaq: XLO), a clinical-stage biotechnology company discovering and developing tumor-activated immuno-oncology therapies for people living with cancer, today announced that it has entered into a securities purchase agreement with certain existing accredited investors, including Bain Capital Life Sciences and Rock Springs Capital, to issue and sell an aggregate of 1,953,125 shares of Xilio common stock at a price of \$0.64 per share and prefunded warrants to purchase up to an aggregate of 15,627,441 shares of Xilio common stock at a purchase price of \$0.6399 per prefunded warrant share, through a private investment in public equity financing. The prefunded warrants will have an exercise price of \$0.0001 per share of common stock, be immediately exercisable and remain exercisable until exercised in full. Xilio anticipates receiving aggregate gross proceeds from the private placement of approximately \$11.3 million, before deducting placement agent fees and expenses payable by the company. The private placement is expected to close on April 2, 2024, subject to the satisfaction of customary closing conditions. Xilio expects to use the proceeds from the private placement to fund working capital and other general corporate purposes.

“Together with our partnership announced with Gilead today for XTX301, our tumor-activated IL-12, this financing enables us to prioritize clinical development for XTX301 as well as XTX101, our tumor-activated, Fc-enhanced anti-CTLA-4, while making focused investments in our promising research-stage pipeline for tumor-activated bispecific and cell engager molecules,” said René Russo, Pharm.D., president and chief executive officer of Xilio. “We are grateful for our investors’ confidence in the potential of our pipeline and platform to develop tumor-activated immuno-oncology therapies for people living with cancer.”

Dr. Russo continued, “We believe our decision to reprioritize Xilio’s clinical- and research-stage investments and resources best positions us to achieve near-term clinical milestones and value-drivers while seeking to deliver on the long-term promise of our differentiated research platform and capabilities. I extend sincere gratitude to each employee impacted by this difficult decision, as their contributions and dedication have played a critical role in working toward Xilio’s mission to improve the lives of patients with cancer.”

Exclusive License Agreement with Gilead

As previously announced today, Xilio entered into an exclusive license agreement with Gilead Sciences, Inc. (Gilead) for Xilio's tumor-activated IL-12 program, including XTX301. Under the terms of the agreement:

- Xilio will receive \$43.5 million in upfront payments, including a cash payment of \$30.0 million and an initial equity investment by Gilead of \$13.5 million in Xilio common stock at a purchase price of \$1.97 per share.
- Xilio will be eligible to receive up to \$604.0 million in additional contingent payments, including proceeds from up to three additional equity investments by Gilead, a \$75.0 million transition fee and specified development, regulatory and sales-based milestones. Xilio will also be eligible to receive tiered royalties ranging from high single digits to mid-teens on annual global net product sales.
- Prior to the potential transition fee, Xilio is eligible to receive up to a total of \$29.0 million in additional equity investments and a development milestone payment.
- Xilio will be responsible for conducting clinical development for XTX301 in the ongoing Phase 1 clinical trial through dose expansion. Following the delivery by Xilio of a specified clinical data package for XTX301, Gilead can elect to transition responsibilities for the development and commercialization of XTX301 to Gilead, subject to the terms of the agreement and payment by Gilead of the \$75.0 million transition fee. If Gilead elects not to transition responsibilities for development and commercialization of the licensed products and pay the transition fee, then the license agreement will automatically terminate.

For more information on the Gilead transactions, read the press release [here](#).

Additional Data from Phase 2 Clinical Trial for XTX202

Xilio today also announced additional data from its Phase 2 clinical trial evaluating XTX202, a tumor-activated, beta-gamma biased IL-2, in patients with metastatic renal cell carcinoma (RCC) or unresectable or metastatic melanoma.

As of a data cutoff date of March 6, 2024:

- A total of 17 RCC patients and 20 melanoma patients were administered XTX202 in the Phase 2 trial in an outpatient setting at dose levels of 1.4 mg/kg once every three weeks (Q3W) or 4 mg/kg Q3W.
- In 26 patients evaluable for anti-tumor activity at both dose levels, stable disease (SD) continued to be the best response. Investigators reported SD of at least nine-weeks duration in 7 RCC patients (70% disease control rate) and in 9 melanoma patients (56% disease control rate). In addition, XTX202 continued to be generally well-tolerated with safety data consistent with previously reported results. Xilio plans to present the full data set at a future medical meeting.

Together with previously reported data, Xilio believes these additional data further validate the company's tumor-activated approach and support the broad potential for XTX202 as a combination therapy. Xilio plans to explore strategic opportunities to continue to develop XTX202 in combination with other agents.

Strategic Portfolio Reprioritization

In addition, Xilio today announced plans to reprioritize its resources, including a workforce reduction.

As part of the strategic portfolio reprioritization and workforce reduction, Xilio plans to:

- focus on rapidly advancing clinical development for XTX301 and XTX101 and leveraging the company's promising research platform to advance differentiated bispecific and cell engager molecules;
- discontinue further investment in XTX202 as a monotherapy; and
- undertake efforts to further reduce its expenses and streamline its operations, including a reduction in headcount of 15 employees, representing approximately 21% of the company's current workforce.

In connection with the workforce reduction, Xilio expects to incur one-time costs of approximately \$1.0 million, primarily related to cash expenditures for severance and benefits continuation. The company estimates that the workforce reduction will be substantially completed in the first half of 2024.

Financial Guidance

In the first quarter of 2024, Xilio repaid all amounts outstanding under its loan and security agreement with Pacific Western Bank (PacWest), and PacWest released all security interests in the company's and its affiliates' assets.

As of December 31, 2023, cash and cash equivalents were \$44.7 million. This cash estimate is a preliminary estimate and is based on information available to management as of the date of this private placement, and these estimates could change.

Based on its current operating plans, Xilio anticipates that its cash and cash equivalents as of December 31, 2023, together with the upfront payment under the license agreement with Gilead, the proceeds from the initial equity investment by Gilead, the anticipated net proceeds from the private placement and after giving effect to one-time costs and anticipated future cost savings associated with the strategic portfolio reprioritization and workforce reduction and the repayment of the outstanding loan balance under the PacWest loan agreement in the first quarter of 2024, will be sufficient to fund its operating expenses and capital expenditure requirements into the second quarter of 2025.

Conference Call Information

Xilio will host a live webcast today beginning at 8:00 a.m. ET to discuss this financing, the transaction with Gilead and other corporate updates. To access the live call, please register [here](#). A webcast of the call will also be available under "Events and Presentations" in the Investors & Media section of the Xilio website at <https://ir.xiliotx.com/>. The archived webcast will be available on the Xilio website approximately two hours after the conference call and will be available for 30 days following the call.

Additional Information Regarding the Private Placement

The securities being issued and sold in this private placement, including the shares of common stock underlying the prefunded warrants, are being made in a transaction not involving a public offering and have not been registered under the Securities Act of 1933, as amended, and may not be offered or sold in the United States except pursuant to an effective registration statement or an applicable exemption from the registration requirements. Concurrently with the execution of the securities purchase agreement, Xilio and

the investors entered into a registration rights agreement pursuant to which Xilio has agreed to file a registration statement with the Securities and Exchange Commission registering the resale of the securities sold in the private placement.

This press release shall 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 other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction. Any offering of the common stock or prefunded warrants described above under the resale registration statement will only be by means of a prospectus.

About XTX301 (IL-12) and the Phase 1 Clinical Trial

XTX301 is an investigational tumor-activated IL-12 designed to potently stimulate anti-tumor immunity and reprogram the tumor microenvironment (TME) of poorly immunogenic “cold” tumors towards an inflamed or “hot” state. Xilio is currently evaluating the safety and tolerability of XTX301 as a monotherapy in patients with advanced solid tumors in a first-in-human, multi-center, open-label Phase 1 clinical trial. Please refer to NCT05684965 on www.clinicaltrials.gov for additional details.

About XTX101 (anti-CTLA-4) and the Phase 1/2 Combination Clinical Trial

XTX101 is an investigational tumor-activated, Fc-enhanced, high affinity binding anti-CTLA-4 monoclonal antibody designed to block CTLA-4 and deplete regulatory T cells when activated (unmasked) in the tumor microenvironment (TME). In the third quarter of 2023, Xilio entered into a co-funded clinical trial collaboration with Roche to evaluate XTX101 in combination with atezolizumab (Tecentriq®) in a multi-center, open-label Phase 1/2 clinical trial. Xilio is currently evaluating the safety and tolerability of the combination in patients with advanced solid tumors in the Phase 1 dose escalation portion of the clinical trial. Subject to the results of Phase 1 combination dose escalation, Xilio plans to evaluate the safety and efficacy of the combination in the Phase 2 portion of the clinical trial in patients with microsatellite stable colorectal cancer. Please refer to NCT04896697 on www.clinicaltrials.gov for additional details.

About XTX202 (IL-2) and the Phase 2 Clinical Trial

XTX202 is an investigational tumor-activated, beta-gamma biased IL-2 designed to potently stimulate CD8+ effector T cells and natural killer (NK) cells without concomitant stimulation of regulatory T cells when activated (unmasked) in the TME. The Phase 2 clinical trial is a multi-center, open-label trial designed to evaluate the safety and efficacy of XTX202 as a monotherapy in patients with unresectable or metastatic melanoma and metastatic renal cell carcinoma who have progressed on standard-of-care treatment. Please refer to NCT05052268 on www.clinicaltrials.gov for additional details.

About Xilio Therapeutics

Xilio Therapeutics is a clinical-stage biotechnology company discovering and developing tumor-activated immuno-oncology (I-O) therapies with the goal of significantly improving outcomes for people living with cancer without the systemic side effects of current I-O treatments. The company is using its proprietary platform to build a pipeline of novel, tumor-activated molecules, including antibodies, cytokines, bispecifics and cell engagers, which are designed to optimize the therapeutic index and localize anti-tumor activity within the tumor microenvironment. Xilio is currently advancing multiple programs for tumor-activated I-O treatments in clinical development, as well as leveraging its differentiated research platform to advance tumor-activated bispecific and cell engager molecules in preclinical development. Learn more by visiting www.xiliotx.com and follow us on LinkedIn (Xilio Therapeutics, Inc.).

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, statements regarding the expected closing of the private placement; Xilio's anticipated use of proceeds from the private placement; whether the conditions for the closing of the private placement will be satisfied; the filing of a registration statement to register the resale of the shares and pre-funded warrant shares to be issued and sold in the private placement; the amount of proceeds expected from the transactions with Gilead; the timing and certainty of completion of the transactions with Gilead; expectations related to the cost, savings and timing of the strategic portfolio reprioritization and workforce reduction; the potential impact of the strategic portfolio reprioritization and workforce reduction on Xilio's operations and development timelines; Xilio's intent and ability to explore strategic opportunities to develop XTX202 in combination with other agents; the potential benefits of any of Xilio's current or future product candidates in treating patients as a monotherapy or combination therapy; Xilio's estimated cash and cash equivalents and the period in which Xilio expects to have cash to fund its operations; the potential for Xilio to leverage its research platform to develop bispecific or cell engager molecules; and Xilio's strategy, goals and anticipated financial performance, milestones, business plans and focus. The words "aim," "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "seek," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of important risks, uncertainties and other factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, general market conditions; whether the conditions for the closing of the transactions with Gilead will be satisfied; whether the conditions for the closing of the private placement will be satisfied; Xilio's ability to successfully achieve the benefits of the strategic portfolio reprioritization and workforce reduction; risks and uncertainties related to ongoing and planned research and development activities, including initiating, conducting or completing preclinical studies and clinical trials and the timing and results of such preclinical studies or clinical trials; the delay of any current or planned preclinical studies or clinical trials or the development of Xilio's current or future product candidates; Xilio's ability to obtain and maintain sufficient preclinical and clinical supply of current or future product candidates; Xilio's advancement of multiple early-stage programs; interim or preliminary preclinical or clinical data or results, which may not be replicated in or predictive of future preclinical or clinical data or results; Xilio's ability to successfully demonstrate the safety and efficacy of its product candidates and gain approval of its product candidates on a timely basis, if at all; results from preclinical studies or clinical trials for Xilio's product candidates, which may not support further development of such product candidates; actions of regulatory agencies, which may affect the initiation, timing and progress of current or future clinical trials; Xilio's ability to obtain, maintain and enforce patent and other intellectual property protection for current or future product candidates; Xilio's ability to obtain and maintain sufficient cash resources to fund its operations; the impact of international trade policies on Xilio's business, including U.S. and China trade policies; Xilio's ability to maintain its clinical trial collaboration with Roche to develop XTX101 in combination with atezolizumab; and Xilio's ability to maintain its license agreement with Gilead to develop XTX301. These and other risks and uncertainties are described in greater detail in the sections entitled "Risk Factor Summary" and "Risk Factors" in Xilio's filings with the U.S. Securities and Exchange Commission (SEC), including Xilio's most recent Quarterly Report on Form 10-Q and any other filings that Xilio has made or may make with the SEC in the future. Any forward-looking statements contained in this press release represent Xilio's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. Except as required by law, Xilio explicitly disclaims any obligation to update any forward-looking statements.

This press release contains hyperlinks to information that is not deemed to be incorporated by reference in this press release.

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