

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

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

Date of report (Date of earliest event reported): November 17, 2025

Invivyd, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-40703
(Commission
File Number)

85-1403134
(IRS Employer
Identification No.)

209 Church Street
New Haven, CT
(Address of Principal Executive Offices)

06510
(Zip Code)

Registrant's telephone number, including area code: (781) 819-0080

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:

- 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	IVVD	The Nasdaq Stock Market LLC

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

Emerging growth company

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

Item 1.01. Entry Into a Material Definitive Agreement.

On November 17, 2025, Invivyd, Inc. (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with Cantor Fitzgerald & Co., as representative of the underwriters named therein (the “Underwriters”), in connection with its previously announced underwritten public offering (the “Offering”) of 44,000,000 shares (the “Shares”) of the Company’s common stock, par value \$0.0001 per share (the “Common Stock”), and, to certain investors, in lieu of Common Stock, pre-funded warrants (the “Pre-Funded Warrants”) to purchase 6,000,000 shares of Common Stock. The price to the public for the Shares in the Offering was \$2.50 per Share, and the price to the public for the Pre-Funded Warrants was \$2.4999 per Pre-Funded Warrant, which represents the price to the public for the Shares less the \$0.0001 per share exercise price for each such Pre-Funded Warrant. In addition, under the terms of the Underwriting Agreement, the Company granted the Underwriters an option, exercisable for 30 days, to purchase up to an additional 7,500,000 shares of Common Stock at the same price.

The net proceeds to the Company from the Offering were approximately \$117.2 million, after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company. The Offering closed on November 19, 2025.

The Company intends to use the net proceeds from the Offering, together with its existing cash and cash equivalents, for commercial preparedness for the potential launch of VYD2311, continued research and development related to its pipeline programs such as respiratory syncytial virus (RSV) and measles, continued advancement of the Spike Protein Elimination and Recovery (SPEAR) Study Group efforts related to assessing the effects of monoclonal antibody therapy for Long COVID and COVID-19 Post-Vaccination Syndrome, and for working capital and other general corporate purposes.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. The representations, warranties, and covenants contained in the Underwriting Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement, and may be subject to limitations agreed upon by the contracting parties.

The Offering was made pursuant to the Company’s shelf registration statement on Form S-3 (File No. 333-267643), declared effective by the Securities and Exchange Commission on October 5, 2022, a base prospectus dated October 5, 2022 and the related prospectus supplement dated November 17, 2025.

The Pre-Funded Warrants are exercisable at any time after the date of issuance. The exercise price and the number of shares of Common Stock issuable upon exercise of each Pre-Funded Warrant (the “Pre-Funded Warrant Shares”) are subject to appropriate adjustment in the event of certain stock dividends, subdivisions, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting the Common Stock as well as upon any distribution of assets, including cash, stock or other property, to the Company’s stockholders. The Pre-Funded Warrants will not expire and are exercisable in cash or by means of a cashless exercise. A holder of Pre-Funded Warrants may not exercise such Pre-Funded Warrants if the aggregate number of shares of Common Stock beneficially owned by such holder, together with its affiliates, would beneficially own more than 4.99% (or 9.99% at the initial election of the holder) of the issued and outstanding shares of Common Stock following such exercise, as such percentage ownership is determined in accordance with the terms of the Pre-Funded Warrants. A holder of Pre-Funded Warrants may increase or decrease this percentage not in excess of 19.99% by providing at least 61 days’ prior notice to the Company.

The foregoing summaries of the terms of the Underwriting Agreement and the Pre-Funded Warrants do not purport to be complete and are qualified in their entirety by reference to the Underwriting Agreement and the form of Pre-Funded Warrant, copies of which are filed herewith as Exhibit 1.1 and Exhibit 4.1, respectively, and are incorporated by reference into this Item 1.01. Hogan Lovells US LLP, counsel to the Company, delivered an opinion as to the legality of the issuance and sale of the Shares and the Pre-Funded Warrants in the Offering, as well as the Pre-Funded Warrant Shares, a copy of which is filed as herewith as Exhibit 5.1 and is incorporated by reference into this Item 1.01.

Cautionary Note Regarding Forward-Looking Statements. This Current Report on 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 Offering and the anticipated use of the net proceeds from the

Offering. The risks and uncertainties relating to the Company and the Offering include general market conditions, as well as other risks detailed from time to time in the Company's Securities and Exchange Commission filings, including in its Annual Report on Form 10-K for the year ended December 31, 2024, its Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2025, its Current Reports on Form 8-K and the prospectus supplement dated November 17, 2025 relating to the Offering. These documents contain important factors that could cause actual results to differ from current expectations and from forward-looking statements contained in this Current Report on Form 8-K. Forward-looking statements contained in this Current Report on Form 8-K are made as of the date hereof, and the Company undertakes no duty to update such information whether as a result of new information, future events or otherwise, except as required under applicable law.

Item 8.01. Other Events.

The Company issued press releases announcing the launch and pricing of the Offering on November 17, 2025. Copies of these press releases are filed herewith as Exhibits 99.1 and 99.2, respectively, and are each incorporated by reference into this Item 8.01.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
1.1	Underwriting Agreement, dated November 17, 2025, by and between Invivyd, Inc. and Cantor Fitzgerald & Co.
4.1	Form of Pre-Funded Warrant to Purchase Common Stock
5.1	Opinion of Hogan Lovells US LLP
23.1	Consent of Hogan Lovells US LLP (contained in Exhibit 5.1)
99.1	Press Release announcing the launch of the Offering, dated November 17, 2025
99.2	Press Release announcing the pricing of the Offering, dated November 17, 2025
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

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

INVIVYD, INC.

Date: November 19, 2025

By: /s/ Jill Andersen
Jill Andersen
Chief Legal Officer and Corporate Secretary

Invivyd, Inc.
44,000,000 Shares of Common Stock
(par value \$0.0001 per share)
Pre-Funded Warrants to Purchase 6,000,000 Shares of Common Stock

Underwriting Agreement

November 17, 2025

Cantor Fitzgerald & Co.
As Representative of the several Underwriters listed in
Schedule A hereto

c/o Cantor Fitzgerald & Co.
110 East 59th Street, 6th Floor
New York, NY 10022

Ladies and Gentlemen:

Invivyd, Inc., a Delaware corporation (the “**Company**”), proposes to issue and sell to the several underwriters named in Schedule A (the “**Underwriters**”) an aggregate of (i) 44,000,000 shares of its common stock, par value \$0.0001 per share (the “**Shares**”) and (ii) pre-funded warrants to purchase up to 6,000,000 shares of common stock, at an exercise price of \$0.0001 per share (the “**Pre-Funded Warrants**”). The 44,000,000 Shares to be sold by the Company are called the “**Firm Shares**” and, collectively with the Pre-Funded Warrants, the “**Firm Securities**.” In addition, the Company has granted to the Underwriters an option to purchase up to an additional 7,500,000 Shares pursuant to such option, which are collectively called the “**Option Shares**.” The Firm Shares and, if and to the extent such option is exercised, the Option Shares, are collectively called the “**Offered Shares**,” the shares of common stock issuable upon exercise of the Pre-Funded Warrants are called the “**Warrant Shares**” and the Firm Securities together with the Option Shares are collectively referred to herein as the “**Securities**.” Cantor Fitzgerald & Co. (“**Cantor**”) has agreed to act as representative of the several Underwriters (in such capacity, the “**Representative**”) in connection with the offering and sale of the Securities. To the extent there are no additional underwriters listed on Schedule A, the term “Representative” as used herein shall mean Cantor, as Underwriter, and the term “Underwriters” shall mean either the singular or the plural, as the context requires.

The Company has prepared and filed with the Securities and Exchange Commission (the “**Commission**”) a shelf registration statement on Form S-3, File No. 333-267643, including a base prospectus (the “**Base Prospectus**”) to be used in connection with the public offering and sale of the Securities and the Warrant Shares. Such registration statement, as amended, including the financial statements, exhibits and schedules thereto, in the form in which it became effective under the Securities Act of 1933, and the rules and regulations promulgated thereunder (collectively, the “**Securities Act**”), including all documents incorporated or deemed to be incorporated by reference therein and any information deemed to be a part thereof at the time of effectiveness pursuant to Rule 430A or 430B under the Securities Act, is called the “**Registration Statement**.” Any

registration statement filed by the Company pursuant to Rule 462(b) under the Securities Act in connection with the offer and sale of the Securities and the Warrant Shares is called the “**Rule 462(b) Registration Statement**,” and from and after the date and time of filing of any such Rule 462(b) Registration Statement the term “Registration Statement” shall include the Rule 462(b) Registration Statement. The preliminary prospectus supplement dated November 17, 2025 describing the Securities and the Warrant Shares and the offering thereof (the “**Preliminary Prospectus Supplement**”), together with the Base Prospectus, is called the “**Preliminary Prospectus**,” and the Preliminary Prospectus and any other prospectus supplement to the Base Prospectus in preliminary form that describes the Securities and the Warrant Shares and the offering thereof and is used prior to the filing of the Prospectus (as defined below), together with the Base Prospectus, is called a “**preliminary prospectus**.” As used herein, the term “**Prospectus**” shall mean the final prospectus supplement to the Base Prospectus that describes the Securities and the Warrant Shares and the offering thereof (the “**Final Prospectus Supplement**”), together with the Base Prospectus, in the form first used by the Underwriters to confirm sales of the Securities or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act.

As used herein, “**Applicable Time**” is 6:30 p.m. (New York time) on November 17, 2025. As used herein, “**free writing prospectus**” has the meaning set forth in Rule 405 under the Securities Act, and “**Time of Sale Prospectus**” means the Preliminary Prospectus, as amended or supplemented immediately prior to the Applicable Time, together with the free writing prospectuses, if any, identified on Schedule B hereto, including the free writing prospectus substantially in the form on Schedule B (the “**Pre-Funded Warrant FWP**”), and the pricing information set forth on Schedule C hereto. As used herein, “**Road Show**” means a “road show” (as defined in Rule 433 under the Securities Act) relating to the offering of the Securities and the Warrant Shares contemplated hereby that is a “written communication” (as defined in Rule 405 under the Securities Act). As used herein, “**Section 5(d) Written Communication**” means each written communication (within the meaning of Rule 405 under the Securities Act) that is made in reliance on Section 5(d) of the Securities Act by the Company or any person authorized to act on behalf of the Company to one or more potential investors that are qualified institutional buyers (“**QIBs**”) and/or institutions that are accredited investors (“**IAIs**”), as such terms are respectively defined in Rule 144A and Rule 501(a) under the Securities Act, to determine whether such investors might have an interest in the offering of the Securities and the Warrant Shares; “**Section 5(d) Oral Communication**” means each oral communication, if any, made in reliance on Section 5(d) of the Securities Act by the Company or any person authorized to act on behalf of the Company made to one or more QIBs and/or one or more IAIs to determine whether such investors might have an interest in the offering of the Securities and the Warrant Shares; “**Marketing Materials**” means any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Securities and the Warrant Shares, including any Road Show or investor presentations made to investors by the Company (whether in person or electronically); and “**Permitted Section 5(d) Communication**” means the Section 5(d) Written Communication(s) and Marketing Materials listed on Schedule D attached hereto.

All references in this Agreement to financial statements and schedules and other information which are “contained,” “included” or “stated” in, or “part of” the Registration Statement, the Rule 462(b) Registration Statement, the Preliminary Prospectus, any preliminary

prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, and all other references of like import, shall be deemed to mean and include all such financial statements and schedules and other information which is or is deemed to be incorporated by reference in the Registration Statement, the Rule 462(b) Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, as the case may be.

All references in this Agreement to amendments or supplements to the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus shall be deemed to mean and include the filing of any document under the Securities Exchange Act of 1934, and the rules and regulations promulgated thereunder (collectively, the “**Exchange Act**”) that is or is deemed to be incorporated by reference in the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, or the Prospectus, as the case may be, and the Prospectus shall be deemed to include any “electronic Prospectus” provided for use in connection with the offering of the Securities and Warrant Shares as contemplated by Section 3(n) of this Agreement.

All references in this Agreement to the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus or the Prospectus, any amendments or supplements to any of the foregoing, or any free writing prospectus, shall include any copy thereof filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System (“**EDGAR**”).

In the event that the Company has only one subsidiary, then all references herein to “subsidiaries” of the Company shall be deemed to refer to such single subsidiary, mutatis mutandis.

The Company hereby confirms its agreements with the Underwriters as follows:

1. Representations and Warranties of the Company. The Company represents and warrants to each Underwriter as of the date of this Agreement, the Applicable Time, the First Closing Date (as hereinafter defined) and each Option Closing Date (as hereinafter defined), if any, as follows:

(a) Compliance with Registration Requirements. The Registration Statement has become effective under the Securities Act. The Company has complied, to the Commission’s satisfaction, with all requests of the Commission for additional or supplemental information, if any. No stop order suspending the effectiveness of the Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the knowledge of the Company, are contemplated or threatened by the Commission. At the time the Company’s Annual Report on Form 10-K for the year ended December 31, 2024 (the “**Annual Report**”) was filed with the Commission, or, if later, at the time the Registration Statement was originally filed with the Commission, the Company met the then-applicable requirements for use of Form S-3 under the Securities Act. The Company meets the requirements for use of Form S-3 under the Securities Act specified in FINRA Conduct Rule 5110(a)(1)(C). The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, at the time they were or hereafter are filed with the Commission, or became effective

under the Exchange Act, as the case may be, complied and will comply in all material respects with the requirements of the Exchange Act.

(b) Disclosure. Each preliminary prospectus and the Prospectus when filed complied in all material respects with the Securities Act and, if filed by electronic transmission pursuant to EDGAR, was identical (except as may be permitted by Regulation S-T under the Securities Act) to the copy thereof delivered to the Underwriters for use in connection with the offer and sale of the Securities. Each of the Registration Statement and any post-effective amendment thereto, at the time it became or becomes effective and at all subsequent times, complied and will comply in all material respects with the Securities Act and did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the Applicable Time, the Time of Sale Prospectus did not, and at the time of each sale of the Securities and at the First Closing Date (as defined in Section 2), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Prospectus, as of its date and (as then amended or supplemented) at all subsequent times, did not and at the First Closing Date and at each applicable Option Closing Date, will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the three immediately preceding sentences do not apply to statements in or omissions from the Registration Statement or any post-effective amendment thereto, or the Prospectus or the Time of Sale Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with written information relating to any Underwriter furnished to the Company in writing by the Representative expressly for use therein, it being understood and agreed that the only such information consists of the information described in Section 9(b). There are no contracts or other documents required to be described in the Time of Sale Prospectus or the Prospectus or to be filed as an exhibit to the Registration Statement which have not been described or filed as required.

(c) Free Writing Prospectuses; Road Show. As of the determination date referenced in Rule 164(h) under the Securities Act, the Company was not, is not or will not be (as applicable) an “ineligible issuer” in connection with the offering of the Securities pursuant to Rules 164, 405 and 433 under the Securities Act. Each free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of Rule 433 under the Securities Act, including timely filing with the Commission or retention where required and legending, and each such free writing prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Securities did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, the Prospectus or any preliminary prospectus and not superseded or modified. Except for the free writing prospectuses, if any, identified in Schedule B, including the Pre-Funded Warrant FWP, and electronic road shows, if any, furnished to the Representative before first use, the Company has not prepared, used or referred to, and will not, without the

Representative's prior written consent, prepare, use or refer to, any free writing prospectus. Each Road Show, when considered together with the Time of Sale Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(d) Market Capitalization. At the time the Registration Statement was originally declared effective, and at the time the Company's most recent Annual Report on Form 10-K was filed with the Commission, the Company met the then applicable requirements for the use of Form S-3 under the Securities Act, including, but not limited to, General Instruction I.B.1 of Form S-3. The Company is not a shell company (as defined in Rule 405 under the Securities Act) and has not been a shell company for at least 12 calendar months previously and if it has been a shell company at any time previously, has filed current Form 10 information (as defined in Instruction I.B.6 of Form S-3) with the Commission at least 12 calendar months previously reflecting its status as an entity that is not a shell company.

(e) Emerging Growth Company. As of the date hereof, the Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "**Emerging Growth Company**").

(f) Testing-the-Waters Materials. The Company (i) has not alone engaged in any Section 5(d) Written Communication or Section 5(d) Oral Communication and (ii) has not authorized anyone other than the Representative to engage in such Permitted Section 5(d) Communications. The Company reconfirms that the Representative has been authorized to act on its behalf in undertaking Marketing Materials, Section 5(d) Oral Communications and Section 5(d) Written Communications. The Company has not distributed or approved for distribution any Section 5(d) Written Communications. Any individual Permitted Section 5(d) Communication does not conflict with the information contained in the Registration Statement or the Time of Sale Prospectus, complied in all material respects with the Securities Act, and when taken together with the Time of Sale Prospectus as of the Applicable Time, did not, and as of the First Closing Date and as of each Option Closing Date, as the case may be, will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(g) Distribution of Offering Material By the Company. Prior to the later of (i) the expiration or termination of the option granted to the several Underwriters in Section 2, and (ii) the completion of the Underwriters' distribution of the Securities, the Company has not distributed and will not distribute any offering material in connection with the offering and sale of the Securities other than the Registration Statement, the Time of Sale Prospectus, the Prospectus or any free writing prospectus reviewed and consented to by the Representative, and the free writing prospectuses, if any, identified on Schedule B hereto, including the Pre-Funded Warrant FWP, and any Permitted Section 5(d) Communications.

(h) Financial Information. The consolidated financial statements of the Company included or incorporated by reference in each of the Registration Statement, the Time of Sale Prospectus, and the Prospectus, together with the related schedules and notes thereto, comply as to form in all material respects with the applicable accounting requirements of the Securities Act and present fairly in all material respects the consolidated financial position of the Company and its Subsidiaries as of the dates shown and its results of operations and cash flows for the periods

shown, and such financial statements have been prepared in conformity with generally accepted accounting principles in the United States (“**U.S. GAAP**”) applied on a consistent basis throughout the periods covered thereby except for any normal year-end adjustments and the exclusion of certain footnotes as permitted by the applicable rules of the Commission in the case of the Company’s unaudited interim financial statements. The other financial information included or incorporated by reference in each of the Registration Statement, the Time of Sale Prospectus, and the Prospectus has been derived from the accounting records of the Company and its consolidated Subsidiaries and presents fairly in all material respects the information shown thereby. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus, and the Prospectus fairly presents the information called for in all material respects and has been prepared in accordance with the Commission’s rules and guidelines applicable thereto.

(i) Conformity with EDGAR Filing. The Preliminary Prospectus and Final Prospectus delivered to the Underwriter for use in connection with the sale of the Securities pursuant to this Agreement will be identical to the versions of the Preliminary Prospectus Supplement and Final Prospectus Supplement created to be transmitted to the Commission for filing via EDGAR, except to the extent permitted by Regulation S-T.

(j) Organization. The Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has the corporate power and authority to own or lease its property and to conduct its business as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not, singly or in the aggregate, reasonably be expected to have a material adverse effect on or affecting the assets, business, operations, earnings, properties, condition (financial or otherwise), prospects, stockholders’ equity or results of operations of the Company and the Subsidiaries taken as a whole, or prevent or materially interfere with consummation of the transactions contemplated hereby (a “**Material Adverse Effect**”).

(k) Subsidiaries. The subsidiaries set forth in exhibit 21.1 of the Company’s most recent Annual Report on Form 10-K (collectively, the “**Subsidiaries**”), are the Company’s only significant subsidiaries (as such term is defined in Rule 1 02 of Regulation S X promulgated by the Commission). 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 each of the Registration Statement, the Time of Sale Prospectus and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not, 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.

(l) No Violation or Default. The execution and delivery by the Company of, and the performance by the Company of its obligations under, this Agreement will not contravene any provision of (i) applicable law or (ii) the certificate of incorporation or by-laws of the Company or (iii) any agreement or other instrument binding upon the Company or any of its subsidiaries that is material to the Company and its subsidiaries, taken as a whole, or (iv) any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company or any subsidiary, except in the case of clauses (i), (iii) and (iv), that 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.

(m) No Material Adverse Effect. Except as otherwise disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, subsequent to the respective dates as of which information is given in the Registration Statement, the Time of Sale Prospectus and the Prospectus, there has not been any Material Adverse Effect or the occurrence of any development that the Company reasonably expects will result in a Material Adverse Effect. Subsequent to the respective dates as of which information is given in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company and its Subsidiaries, taken as a whole, have not incurred any material liability or obligation, direct or contingent, nor entered into any material transaction; (ii) the Company has not purchased any of its outstanding capital stock, nor declared, paid or otherwise made any dividend or distribution of any kind on its capital stock other than ordinary and customary dividends; and (iii) there has not been any material change in the capital stock, short-term debt or long-term debt of the Company and its Subsidiaries, taken as a whole (other than the exercise, grant or forfeiture of any equity awards, in each case granted pursuant to any equity compensation plan described in the Prospectus).

(n) Capitalization. The issued and outstanding shares of capital stock of the Company have been validly issued, are fully paid and nonassessable and, other than as disclosed in the Registration Statement, the Time of Sale Prospectus or the Prospectus, are not subject to any preemptive rights, rights of first refusal or similar rights. The Company has an authorized, issued and outstanding capitalization as set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus as of the dates referred to therein (other than the grant of additional options under the Company's existing stock option plans, or changes in the number of outstanding shares of common stock of the Company due to the issuance of shares upon the exercise or conversion of securities exercisable for, or convertible into, common stock outstanding on the date hereof) and such authorized capital stock conforms to the description thereof set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus. The description of the securities of the Company in the Registration Statement, the Time of Sale Prospectus and the Prospectus is complete and accurate in all material respects. Except as disclosed in or contemplated by the Registration Statement, the Time of Sale Prospectus or the Prospectus, as of the date referred to therein, the Company does not have outstanding any options to purchase, or any rights or warrants to subscribe for, or any securities or obligations convertible into, or exchangeable for, or any contracts or commitments to issue or sell, any shares of capital stock or other securities.

(o) Authorization; Enforceability. This Agreement has been duly authorized, executed and delivered by the Company.

(p) Authorization of the Securities and Warrant Shares. The Offered Shares have been duly authorized for issuance and sale pursuant to this Agreement and, when issued, delivered and paid for in accordance with the terms of this Agreement, will be duly and validly issued, fully paid and non-assessable; the Offered Shares, when issued, will conform to the description thereof set forth in or incorporated into the Registration Statement, the Time of Sale Prospectus and the Prospectus; and the issuance of the Offered Shares will not be subject to any preemptive or similar rights; (ii) the Pre-Funded Warrants have been duly authorized by the Company and, when executed and delivered by the Company, will be valid and binding agreements of the Company, enforceable against the Company in accordance with their terms, except as the enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles, and when issued, will conform to the description thereof set forth in or incorporated into the Registration Statement, the Time of Sale Prospectus and the Prospectus; and (iii) the Warrant Shares have been duly authorized and validly reserved for issuance upon exercise of the Pre-Funded Warrants in a number sufficient to meet the current exercise requirements. The Warrant Shares, when issued and delivered upon exercise of the Pre-Funded Warrants in accordance therewith, will be validly issued, fully paid and nonassessable, will conform to the description thereof set forth in or incorporated into the Registration Statement, the Time of Sale Prospectus and the Prospectus, and the issuance of the Warrant Shares is not subject to any preemptive or other similar rights to subscribe for or purchase the Warrant Shares.

(q) No Consents Required. No consent, approval, authorization or order of, or qualification with, any governmental body, agency or court is required for the performance by the Company of its obligations under this Agreement or the Pre-Funded Warrants, except such as have been obtained or waived or may be required by the securities or Blue Sky laws of the various states or the rules and regulations of the Financial Industry Regulatory Authority (“**FINRA**”) in connection with the offer and sale of the Securities.

(r) No Preferential Rights. Except as set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company or to require the Company to include such securities with the Securities registered pursuant to the Registration Statement.

(s) Independent Public Accounting Firm. PricewaterhouseCoopers LLP, who have certified certain financial statements of the Company and its subsidiaries and delivered its report with respect to the audited consolidated financial statements filed with the Commission as part of the Registration Statement and included in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, is an independent registered public accounting firm with respect to the Company within the meaning of the Securities Act and the applicable rules and regulations thereunder adopted by the Commission and the Public Company Accounting Oversight Board (United States) (“**PCAOB**”).

(t) Enforceability of Agreements. All agreements between the Company and third parties expressly referenced in the Prospectus, other than such agreements that have expired by their terms or the termination of which is disclosed in documents filed by the Company on EDGAR, are legal, valid and binding obligations of the Company enforceable in accordance with their respective terms, except to the extent that (i) enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general equitable principles and (ii) the indemnification provisions of certain agreements may be limited by federal or state securities laws or public policy considerations in respect thereof, except for any unenforceability that, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect.

(u) No Litigation. There are no legal or governmental 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 (i) other than proceedings accurately described in all material respects in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus and proceedings that 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 on the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by each of the Registration Statement, the Time of Sale Prospectus and the Prospectus or (ii) that are required to be described in the Registration Statement, the Time of Sale Prospectus or the Prospectus and are not so described.

(v) Consents and Permits. The Company and each of 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 (as defined below), except for such certificates, authorizations and permits the failure of which to possess would not reasonably be expected to have a Material Adverse Effect on the Company and its subsidiaries, taken as a whole; 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 that, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to have a Material Adverse Effect on the Company and its subsidiaries, taken as a whole.

(w) Compliance with Regulatory Authorities. The Company has operated at all times and is currently in material compliance, with all applicable statutes, rules, regulations and policies of the U.S. Food and Drug Administration (the "FDA"), the U.S. Department of Health and Human Services ("HHS") and applicable foreign regulatory authorities, including the European Medicines Agency (collectively, the "**Regulatory Authorities**"), including, without limitation:

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

(ii) 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 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 exclusion laws, the statutes, regulations and directives of applicable government funded or sponsored healthcare programs, and the regulations promulgated pursuant to such statutes;

(iii) the Standards for Privacy of Individually Identifiable Health Information, the Security Standards, and the Standards for Electronic Transactions and Code Sets promulgated under HIPAA, the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), and the regulations promulgated thereunder and any applicable state or non-U.S. counterpart thereof or any other applicable law or regulation the purpose of which is to protect the privacy of individuals or prescribers;

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

(v) licensure, quality, safety and accreditation requirements under applicable federal, state, local or foreign laws or regulatory bodies; and

(vi) 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; (clauses (i) through (viii), collectively, “**Health Care Laws**”).

(x) Intellectual Property. (i) To its knowledge, the Company and its Subsidiaries own, have a license to use, or otherwise possess sufficient rights to all 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 and all other worldwide intellectual property and proprietary rights (including all registrations and applications for registration of, and all goodwill associated with, any of the foregoing) (collectively, “**Intellectual Property Rights**”) used in or that would reasonably be expected to be material to the conduct of their respective businesses as now conducted by them, and as currently proposed to be conducted in the Registration Statement, the Time of Sale Prospectus or the Prospectus; (ii) other than as 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 as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, (A) the Intellectual Property Rights owned, and to the Company’s knowledge, licensed by the Company and its Subsidiaries are valid, subsisting and enforceable, and (B) 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 or any rights of the Company or any of its Subsidiaries in, any such Intellectual Property Rights; (iii) other than as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, neither the Company nor any of its Subsidiaries has received any notice alleging any infringement, misappropriation or other violation of Intellectual Property

Rights of any third party 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; (iv) to the Company's knowledge, no Person (as defined in Section 1(uu)) is infringing, misappropriating or otherwise violating, or has infringed, misappropriated or otherwise violated, any Intellectual Property Rights owned or licensed by the Company or any of its Subsidiaries; (v) other than as 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 as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, to the Company's knowledge, neither the Company nor any of its Subsidiaries infringes, misappropriates or otherwise violates, has infringed, misappropriated or otherwise violated, or would, upon the commercialization of any product or service described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, infringe or otherwise violate, any Intellectual Property Rights of any Person, and the conduct of each of the respective businesses of, the Company and its Subsidiaries currently or as currently proposed to be conducted (including upon the commercialization of products or services) as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus does not infringe, misappropriate, or otherwise violate any Intellectual Property Rights of any Person; (vi) to the Company's knowledge, the Company and its Subsidiaries have taken reasonable steps necessary to secure its respective interests in Intellectual Property Rights, by the execution of appropriate confidentiality agreements and invention assignment agreements, from the Company's and its Subsidiaries' employees or contractors engaged in the development of Intellectual Property Rights on behalf of the Company or any of its Subsidiaries and to the Company's knowledge no such agreement has been breached or violated; (vii) except as disclosed in the Registration Statement, the Time of Sale Prospectus or the Prospectus, to the Company's knowledge, there are no rights of third parties to any such Intellectual Property Rights, including no liens, security interests, or other encumbrances, and there is no pending or threatened action, suit, proceeding or claim by others challenging the Company's rights in or to any Intellectual Property Rights owned by, or licensed to, the Company or its Subsidiaries, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; (viii) to the Company's knowledge, no employee of the Company or its Subsidiaries is or has been in material violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or its Subsidiaries; (ix) to the Company's knowledge, the Company and its Subsidiaries have complied with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company and its Subsidiaries, and all such agreements are in full force and effect; and (x) the Company and its Subsidiaries use, and have used, commercially reasonable efforts to appropriately maintain the confidentiality of all information intended to be maintained as a trade secret.

(y) **Clinical Studies.** (i) The studies, tests and preclinical and clinical trials conducted by or on behalf of or sponsored by the Company or in which the Company has participated, were, and if still pending are, to the knowledge of the Company, being conducted in all material respects in accordance with standard medical and experimental protocols, procedures and controls pursuant to accepted professional scientific research standards and procedures and all applicable Health Care Laws, the rules and regulations of the Regulatory Authorities and current Good Clinical Practices and Good Laboratory Practices; (ii) the descriptions of the results of such studies and

trials contained in the Registration Statement, the Time of Sale Prospectus or the Prospectus are accurate and complete in all material respects and fairly present the data derived from such trials and studies; (iii) the Company has no knowledge of any other studies or trials not described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the results of which are materially inconsistent with or call into question the results described or referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus; and (iv) the Company has not received any written notices, correspondence or other communications from any Regulatory Authority or any other governmental entity requiring or threatening the termination, modification or suspension of any studies or trials that are described in the Registration Statement, the Time of Sale Prospectus and the Prospectus or the results of which are referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus, other than such notices, correspondence or other communications that have been described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, and, to the Company's knowledge, there are no reasonable grounds for the same.

(z) Compliance with Health Care Laws. (i) The Company has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws, and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were timely, complete, accurate and not misleading in all material respects on the date filed (or were corrected or supplemented by a subsequent submission); (ii) the Company has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or Regulatory Authority, other governmental entity or third party alleging that any Company or product operation or activity is in violation of any Health Care Laws, including, without limitation, any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the FDA or any other Regulatory Authority or governmental entity, nor, to the Company's knowledge, is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action threatened; (iii) the Company is not a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any Regulatory Authority or other governmental entity; and (iv) neither the Company nor any of its employees, officers or directors has been excluded, suspended or debarred from participation in any U.S. federal health care program or human clinical research or, to the knowledge of the Company, is subject to an inquiry, investigation, proceeding or other similar action by a Regulatory Authority or other governmental entity that could reasonably be expected to result in debarment, suspension, or exclusion.

(aa) No Material Defaults. Neither the Company nor any of the Subsidiaries has defaulted on any installment on indebtedness for borrowed money or on any rental on one or more long-term leases, which defaults, individually or in the aggregate, would have a Material Adverse Effect. The Company has not filed a report pursuant to Section 13(a) or 15(d) of the Exchange Act since the filing of its last Annual Report on Form 10 K, indicating that it (i) has failed to pay any dividend or sinking fund installment on preferred stock or (ii) has defaulted on any installment on indebtedness for borrowed money or on any rental on one or more long-term leases, which defaults, individually or in the aggregate, would have a Material Adverse Effect.

(bb)Certain Market Activities. Neither the Company, nor any of the Subsidiaries, nor any of their respective directors, officers or controlling persons has taken, directly or indirectly, any action designed, or that has constituted or would reasonably be expected to cause or result in, under the Exchange Act or otherwise, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

(cc)Broker/Dealer Relationships. Neither the Company nor any of the Subsidiaries (i) is required to register as a “broker” or “dealer” in accordance with the provisions of the Exchange Act or (ii) directly or indirectly through one or more intermediaries, controls or is a “person associated with a member” or “associated person of a member” (within the meaning set forth in the FINRA Manual).

(dd)No Reliance. The Company has not relied upon the Underwriter or legal counsel for the Underwriter for any legal, tax or accounting advice in connection with the offering and sale of the Securities.

(ee)Taxes. The Company and each of its Subsidiaries have filed all federal, state, local and foreign tax returns required by law 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 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 U.S. 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 that has not been fully paid or otherwise resolved nor has the Company or any of its subsidiaries received written notice of any tax deficiency which could reasonably be expected to be determined adversely to the Company or its subsidiaries except, in each case, for such tax deficiencies that 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.

(ff)Title to Real and Personal Property. The Company and each of its Subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them that is material to the business of the Company and its subsidiaries, in each case free and clear of all liens, encumbrances and defects except such as do not materially affect the value of such property and do not interfere 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 under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiaries.

(gg)Environmental Laws. The Company and each of its Subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (“**Environmental Laws**”), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any

such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, singly or in the aggregate, reasonably be expected to have a Material Adverse Effect on the Company and its Subsidiaries, taken as a whole. There are no costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties) which would, singly or in the aggregate, reasonably be expected to have A Material Adverse Effect on the Company and its Subsidiaries, taken as a whole.

(hh)Disclosure Controls. The Company and each of its subsidiaries maintain a system of internal accounting controls designed to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with U.S. GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and (v) the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement and the Prospectus fairly presents the information called for in all material respects and is prepared in accordance with the Commission's rules and guidelines applicable thereto. Since the end of the Company's most recent audited fiscal year, other than as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, there has been (i) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (ii) no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. The Company has established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15 and 15d 15) for the Company and designed such disclosure controls and procedures to ensure that material information relating to the Company and each of its Subsidiaries is made known to the certifying officers by others within those entities, particularly during the period in which the Company's Annual Report on Form 10-K or Quarterly Report on Form 10-Q, as the case may be, is being prepared. The Company's certifying officers have evaluated the effectiveness of the Company's disclosure controls and procedures as of a date within 90 days prior to the filing date of the Form 10-K for the fiscal year most recently ended (such date, the "**Evaluation Date**"). The Company presented in its Annual Report on Form 10-K for the fiscal year most recently ended the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date and the disclosure controls and procedures were effective at the reasonable assurance level. Since the Evaluation Date, there have been no significant changes in the Company's internal controls (as such term is defined in Item 307(b) of Regulation S-K under the Securities Act) or, to the Company's knowledge, in other factors that could significantly affect the Company's internal controls.

(ii)Sarbanes-Oxley. There is and has been no failure on the part of the Company or any of the Company's directors or officers, in their capacities as such, to comply in all material respects with any applicable provisions of the Sarbanes-Oxley Act and the rules and regulations promulgated thereunder. Each of the principal executive officer and the principal financial officer

of the Company (or each former principal executive officer of the Company and each former principal financial officer of the Company as applicable) has made all certifications required by Sections 302 and 906 of the Sarbanes-Oxley Act with respect to all reports, schedules, forms, statements and other documents required to be filed by it or furnished by it to the Commission. For purposes of the preceding sentence, “principal executive officer” and “principal financial officer” shall have the meanings given to such terms in the Sarbanes-Oxley Act.

(jj) Brokers. Neither the Company nor any of the Subsidiaries has incurred any liability for any finder’s fees, brokerage commissions or similar payments in connection with the transactions herein contemplated, except as may otherwise exist with respect to the Underwriters pursuant to this Agreement.

(kk) Labor Disputes. No material labor dispute with the employees of the Company or any of its Subsidiaries exists, or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that would, singly or in the aggregate, reasonably be expected to have a Material Adverse Effect on the Company and its Subsidiaries, taken as a whole.

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

(mm) Operations. 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 (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 knowledge of the Company, threatened.

(nn) Off-Balance Sheet Arrangements. There are no transactions, arrangements and other relationships between and/or among the Company, and/or any of its affiliates and any unconsolidated entity, including, but not limited to, any structured finance, special purpose or limited purpose entity (each, an “**Off-Balance Sheet Transaction**”) that could reasonably be expected to affect materially the Company’s liquidity or the availability of or requirements for its capital resources, including those Off-Balance Sheet Transactions described in the Commission’s Statement about Management’s Discussion and Analysis of Financial Conditions and Results of Operations (Release Nos. 33 8056; 34 45321; FR 61), required to be described in the Prospectus which have not been described as required.

(oo)ERISA. To the knowledge of the Company, each material employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (“**ERISA**”), that is maintained, administered or contributed to by the Company or any of its affiliates for employees or former employees of the Company and any of its Subsidiaries has been maintained in material compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Internal Revenue Code of 1986, as amended (the “**Code**”); no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred which would result in a material liability to the Company with respect to any such plan excluding transactions effected pursuant to a statutory or administrative exemption; and for each such plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no “accumulated funding deficiency” as defined in Section 412 of the Code has been incurred, whether or not waived, and the fair market value of the assets of each such plan (excluding for these purposes accrued but unpaid contributions) exceeds the present value of all benefits accrued under such plan determined using reasonable actuarial assumptions.

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

(qq)Margin Rules. Neither the issuance, sale and delivery of the Securities nor the application of the proceeds thereof by the Company as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(rr)Insurance. 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 are reasonably 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, singly or in the aggregate, reasonably be expected to have a Material Adverse Effect on the Company and its Subsidiaries, taken as a whole.

(ss)No Improper Practices. (i) 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 affiliate (within the meaning of Rule 405 under the Securities Act) of the Company other than its Controlled Affiliates, 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 or from 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) (“**Government Official**”) in order to influence official action, or to any person in violation of any

applicable anti-corruption laws; (ii) the Company and each of its Subsidiaries and Controlled Affiliates, and, to the Company's knowledge, the Company's affiliates (within the meaning of Rule 405 under the Securities Act) other than its Controlled Affiliates, have conducted their businesses in compliance with applicable anti-corruption laws and have instituted and maintained and will continue to maintain policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; and (iii) neither the Company nor any of its Subsidiaries will use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-corruption laws. A "**Controlled Affiliate**" means any entity controlled by the Company.

(tt)No Conflicts. Neither the execution of this Agreement and the Pre-Funded Warrants, nor the issuance, offering or sale of the Securities, nor the consummation of any of the transactions contemplated herein and therein, nor the compliance by the Company with the terms and provisions hereof and thereof will conflict with, or will result in a breach of, any of the terms and provisions of, or has constituted or will constitute a default under, or has resulted in or will result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company pursuant to the terms of any contract or other agreement to which the Company may be bound or to which any of the property or assets of the Company is subject, except (i) such conflicts, breaches or defaults as may have been waived and (ii) such conflicts, breaches and defaults that would not reasonably be expected to have a Material Adverse Effect; nor will such action result (x) in any violation of the provisions of the organizational or governing documents of the Company, or (y) in any material violation of the provisions of any statute or any order, rule or regulation applicable to the Company or of any Governmental Authority having jurisdiction over the Company.

(uu)Sanctions.

(i) None of the Company, any of its subsidiaries, or any director, officer, or employee thereof, or, to the Company's knowledge, any agent, affiliate (within the meaning of Rule 405 under the Securities Act) or representative of the Company or any of its subsidiaries, is an individual or entity ("**Person**") that is, or is owned or controlled by one or more Persons that are:

(A) 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

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

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

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

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

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

(vv) Statistical and Market-Related Data. The statistical, industry-related and market-related data included in each of the Registration Statement and the Prospectus are based on or derived from sources that the Company reasonably and in good faith believes are reliable and accurate and such data is consistent with the sources from which they are derived, in each case in all material respects.

(ww) Stock Exchange Listing. The Shares are registered pursuant to Section 12(b) or 12(g) of the Exchange Act and are listed on The Nasdaq Global Market (the “**Nasdaq**”), and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Shares under the Exchange Act or delisting the Shares from the Nasdaq, nor has the Company received any notification that the Commission or the Nasdaq is contemplating terminating such registration or listing. To the Company’s knowledge, except as disclosed in the Registration Statement, the Time of Sale Prospectus or the Prospectus, it is in compliance with all applicable listing requirements of Nasdaq.

(xx) FINRA Matters. The information provided to the Underwriters by the Company on behalf of the Company, and to the Company’s knowledge, its counsel, and its officers and directors, as applicable, for purposes of the Underwriters’ compliance with applicable FINRA rules in connection with the offering of the Securities is true, complete, and correct and compliant with FINRA’s rules.

(yy) Parties to Lock-Up Agreements. The Company has furnished to the Underwriters a letter agreement in the form attached hereto as Exhibit A (the “**Lock-up Agreement**”) from each of the persons listed on Exhibit B. Such Exhibit B lists under an appropriate caption the directors and executive officers of the Company. If any additional persons shall become directors or executive officers of the Company prior to the end of the Company Lock-up Period (as defined below), the Company shall cause each such person, prior to or contemporaneously with their appointment or election as a director or executive officer of the Company, to execute and deliver to the Representative a Lock-up Agreement.

(zz) Cybersecurity. (i) The Company and its Subsidiaries’ respective information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, technology and databases owned by the Company and/or its Subsidiaries and/or used in connection with the operation of the Company’s and its subsidiaries’ respective businesses (“**IT Systems**”) are adequate for, and operate and perform in all material respects as required in

connection with, the operation of the business of the Company and its Subsidiaries as currently conducted, and to the Company's knowledge, free and clear of all bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants, including those designed or intended to have any of the following functions: (A) disrupting, disabling, harming or otherwise impeding in any manner the operation of, or permitting or causing unauthorized access to, a system, network or other device or (B) damaging or destroying any data or file without the user's consent; (ii) the Company and each of its subsidiaries have taken all reasonable and appropriate technical, administrative, physical, security, and organizational measures to protect and secure the confidentiality, availability, security, and integrity of IT Systems (including all proprietary and confidential data, Personal Data, and the data and information of their respective customers, employees, suppliers, vendors and any third party data maintained, processed or stored by or on behalf of the Company and/or its subsidiaries (collectively, the "**IT Systems and Data**")), and without limiting the foregoing, the Company and its Subsidiaries have used reasonable and appropriate efforts to establish and maintain, and have established, maintained, implemented and complied with, in all material respects, reasonable and appropriate information technology, information security, cyber security and data protection controls, policies and procedures, such as oversight, access controls, encryption, technological and physical safeguards and business continuity/disaster recovery and security plans, to protect against, prevent and detect the unauthorized, unlawful or accidental destruction, loss, distribution, use, access, disablement, misappropriation, processing, or modification, or other breach, compromise or misuse of or relating to any IT Systems and Data ("**Breach**"); and (iii) there has been no material Breach that compromised the security or integrity of the IT Systems and Data, and the Company and its Subsidiaries have not been notified of, and have no knowledge of any event or condition that would reasonably be expected to result in, any such Breach.

(aaa)Compliance with Data Privacy Laws. (i) The Company and each of its subsidiaries have complied and are presently in compliance with the Company's and its Subsidiaries', as applicable, written privacy policies, contractual obligations and all applicable laws, statutes, judgments, orders, rules and regulations of any court or arbitrator or other governmental or regulatory authority and any other applicable legal obligations, in each case, relating to the collection, use, transfer, import, export, storage, protection, disposal, disclosure, and other processing by the Company or any of its subsidiaries of IT Systems or Data ("**Data Security Obligations**"), any information or data that relates to an identified or identifiable natural person, or that is reasonably capable of being used to identify, contact, or precisely locate a natural person, "**Personal Data**"; (ii) the Company and its Subsidiaries have not received any notification of or complaint regarding, and are unaware of any other facts that, individually or in the aggregate, would reasonably indicate material non-compliance with any applicable Data Security Obligation by the Company or any of its subsidiaries; and (iii) there is no action, suit or proceeding by or before any court or governmental agency, authority or body pending or, to the Company's knowledge, threatened in writing alleging non-compliance with any applicable Data Security Obligation by the Company or any of its Subsidiaries.

(bbb)Stock Transfer Taxes. On each Closing Date, all stock transfer or other taxes (other than income taxes) which are required to be paid in connection with the sale and transfer of the Securities to be sold hereunder will be, or will have been, fully paid or provided for by the Company and all laws imposing such taxes will be or will have been fully complied with.

(ccc)No Rated Securities. Neither the Company nor any of its subsidiaries, nor any Affiliate, has any securities rated by any “nationally recognized statistical rating organization,” as such term is defined in Section 3(a)(62) of the Exchange Act.

(ddd)Outbound Investment Security Program. The Company is not a “covered foreign person”, as that term is defined in 31 C.F.R. § 850.209. The Company does not currently engage, or have plans to engage, directly or indirectly, in a “covered activity”, as that term is defined in 31 C.F.R. § 850.208 (“**Covered Activity**”). The Company does not have any joint venture that engages in or plans to engage in any Covered Activity. The Company also does not, directly or indirectly, hold a board seat on, have a voting or equity interest in, or have any contractual power to direct or cause the direction of the management or policies of any person or persons that engages or plans to engage in any Covered Activity.

Any certificate signed by any officer of the Company and delivered to any Underwriter or to counsel for the Underwriters in connection with the offering, or the purchase and sale, of the Securities shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

The Company has a reasonable basis for making each of the representations set forth in this Section 1. The Company acknowledges that the Underwriters and, for purposes of the opinions to be delivered pursuant to Section 6, counsel to the Company and counsel to the Underwriters, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

2. Purchase, Sale and Delivery of the Securities.

(a) The Firm Securities. Upon the terms herein set forth, the Company agrees to issue and sell to the several Underwriters, and on the basis of the representations, warranties and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Underwriters agree, severally and not jointly, to purchase from the Company the respective number of Securities set forth opposite their names on Schedule A, subject to adjustment in accordance with Section 11 hereof. The purchase price per Firm Share to be paid by the several Underwriters to the Company shall be \$2.35 per share. The purchase price per Pre-Funded Warrant to be paid by the several Underwriters to the Company shall be \$2.3499 per Pre-Funded Warrant.

(b) The First Closing Date. Delivery of the Firm Securities to be purchased by the Underwriters and payment therefor shall be made at the offices of Cooley LLP, 55 Hudson Yards, New York, NY 10001 (or such other place as may be agreed to by the Company and the Representative) at 10:00 a.m. Eastern time, on November 19, 2025, or such other time and date not later than 1:30 p.m. Eastern time, on December 3, 2025 as the Representative shall designate by notice to the Company (the time and date of such closing are called the “**First Closing Date**”). The Company hereby acknowledges that circumstances under which the Representative may provide notice to postpone the First Closing Date as originally scheduled include, but are not limited to, any determination by the Company or the Representative to recirculate to the public copies of an amended or supplemented Prospectus or a delay as contemplated by the provisions of Section 11.

(c) The Option Shares; Option Closing Date. In addition, on the basis of the representations, warranties and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Company hereby grants an option to the several Underwriters to purchase, severally and not jointly, up to an aggregate of 7,500,000 Option Shares from the Company at the purchase price per share to be paid by the Underwriters for the Firm Shares. The option granted hereunder may be exercised at any time and from time to time in whole or in part upon notice by the Representative to the Company, which notice may be given at any time within 30 days from the date of this Agreement. Such notice shall set forth (i) the aggregate number of Option Shares as to which the Underwriters are exercising the option and (ii) the time, date and place at which certificates for the Option Shares will be delivered (which time and date may be simultaneous with, but not earlier than, the First Closing Date; and in the event that such time and date are simultaneous with the First Closing Date, the term “**First Closing Date**” shall refer to the time and date of delivery of certificates for the Firm Securities and such Option Shares). Any such time and date of delivery, if subsequent to the First Closing Date, is called an “**Option Closing Date,**” shall be determined by the Representative and shall not be earlier than three or later than five full Business Days after delivery of such notice of exercise. If any Option Shares are to be purchased, (a) each Underwriter agrees, severally and not jointly, to purchase the number of Option Shares (subject to such adjustments to eliminate fractional shares as the Representative may determine) that bears the same proportion to the total number of Option Shares to be purchased as the number of Firm Shares set forth on Schedule A opposite the name of such Underwriter bears to the total number of Firm Securities and (b) the Company agrees to sell the number of Option Shares set forth in the paragraph “Introductory” of this Agreement (subject to such adjustments to eliminate fractional shares as the Representative may determine). The Representative may cancel the option at any time prior to its expiration by giving written notice of such cancellation to the Company.

In the event that any purchaser of the Pre-Funded Warrants in the public offering fails to make payment to the Company for all or part of the Pre-Funded Warrants (the “**Failed Warrants**”) on the First Closing Date, the Representative may elect, by written notice to the Company and payment of the purchase price per share by wire transfer in immediately available funds to the account specified by the Company at the location and time designated in this Section 2(c) for the First Closing Date, to receive a number of shares of Common Stock equivalent to the number of Failed Warrants at the purchase price per share in lieu of the Failed Warrants that were otherwise to have been delivered to the purchasers thereof under this Agreement.

(d) Public Offering of the Offered Shares. The Representative hereby advises the Company that the Underwriters intend to offer for sale to the public, initially on the terms set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus, their respective portions of the Offered Shares as soon after this Agreement has been executed as the Representative, in its sole judgment, has determined is advisable and practicable.

(e) Payment for the Offered Shares and Pre-Funded Warrants. (i) Payment for the Offered Shares shall be made at the First Closing Date (and, if applicable, at each Option Closing Date) by wire transfer of immediately available funds to the order of the Company. (ii) It is understood that the Representative has been authorized, for their own account and the accounts of the several Underwriters, to accept delivery of and receipt for, and make payment of the purchase price for, the Firm Securities and any Option Shares the Underwriters have agreed to

purchase. Cantor, individually and not as the Representative of the Underwriters, may (but shall not be obligated to) make payment for any Firm Securities and any Option Shares to be purchased by any Underwriter whose funds shall not have been received by the Representative by the First Closing Date or the applicable Option Closing Date, as the case may be, for the account of such Underwriter, but any such payment shall not relieve such Underwriter from any of its obligations under this Agreement.

(f) Delivery of the Offered Shares and Pre-Funded Warrants. The Company shall deliver, or cause to be delivered through the facilities of the Depository Trust Company (“DTC”) to the Representative for the accounts of the several Underwriters certificates for the Firm Shares at the First Closing Date, against the irrevocable release of a wire transfer of immediately available funds for the amount of the purchase price therefor. The Company shall also deliver, or cause to be delivered through the facilities of DTC unless the Representative shall otherwise instruct, to the Representative for the accounts of the several Underwriters, certificates for the Option Shares the Underwriters have agreed to purchase at the First Closing Date or the applicable Option Closing Date, as the case may be, against the release of a wire transfer of immediately available funds for the amount of the purchase price therefor. If the Representative so elects, delivery of the Offered Shares may be made by credit to the accounts designated by the Representative through The Depository Trust Company’s full fast transfer or DWAC programs. The certificates for the Offered Shares shall be registered in such names and denominations as the Representative shall have requested at least two full Business Days prior to the First Closing Date (or the applicable Option Closing Date, as the case may be) and shall be made available for inspection on the Business Day preceding the First Closing Date (or the applicable Option Closing Date, as the case may be) at a location in New York City as the Representative may designate. Time shall be of the essence, and delivery at the time and place specified in this Agreement is a further condition to the obligations of the Underwriters.

The Pre-Funded Warrants shall be delivered to the Representative in definitive form, registered in such names and in such denominations as the Representative shall request in writing not later than the First Closing Date. The Pre-Funded Warrants will be made available for inspection by the Representative on the business day prior to the First Closing Date.

Notwithstanding the foregoing, the Company and the Representative shall instruct purchasers of the Pre-Funded Warrants in the public offering to make payment for the Pre-Funded Warrants on the First Closing Date to the Company by wire transfer in immediately available funds to the account specified by the Company at a purchase price of \$2.4999 per Pre-Funded Warrant, in lieu of payment by the Underwriters for such Pre-Funded Warrants, and the Company shall deliver such Pre-Funded Warrants to such purchasers on the First Closing Date in definitive form against such payment, in lieu of the Company’s obligation to deliver such Pre-Funded Warrants to the Underwriters; provided that, the underwriting discounts and commissions in respect of the Pre-Funded Warrants, as calculated by subtracting the purchase price per Pre-Funded Warrant set forth in Section 2(a) hereof from the public offering price per Warrant set forth on Schedule C hereto, shall be deducted and withheld from the amount otherwise payable by the Representative to the Company for the Shares as set forth above in this Section 2(f).

3. Additional Covenants of the Company.

The Company further covenants and agrees with each Underwriter as follows:

(a) Delivery of Registration Statement, Time of Sale Prospectus and Prospectus. The Company shall furnish to the Representative in New York City, without charge, prior to 10:00 a.m. New York City time on the Business Day next succeeding the date of this Agreement and during the period when a prospectus relating to the Securities is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) in connection with sales of the Securities, as many copies of the Time of Sale Prospectus, the Prospectus and any supplements and amendments thereto or to the Registration Statement as the Representative may reasonably request.

(b) Representative's Review of Proposed Amendments and Supplements. During the period when a prospectus relating to the Securities is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), the Company (i) will furnish to the Representative for review, a reasonable period of time prior to the proposed time of filing of any proposed amendment or supplement to the Registration Statement, a copy of each such amendment or supplement and (ii) will not amend or supplement the Registration Statement (including any amendment or supplement through incorporation of any report filed under the Exchange Act) without the Representative's prior written consent, with such consent not to be unreasonably withheld, conditioned or delayed. Prior to amending or supplementing any preliminary prospectus, the Time of Sale Prospectus or the Prospectus (including any amendment or supplement through incorporation of any report filed under the Exchange Act), the Company shall furnish to the Representative for review, a reasonable amount of time prior to the time of filing or use of the proposed amendment or supplement, a copy of each such proposed amendment or supplement. The Company shall not file or use any such proposed amendment or supplement without the Representative's prior written consent, with such consent not to be unreasonably withheld, conditioned or delayed. The Company shall file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.

(c) Free Writing Prospectuses. The Company shall furnish to the Representative for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of each proposed free writing prospectus or any amendment or supplement thereto prepared by or on behalf of, used by, or referred to by the Company, and the Company shall not file, use or refer to any proposed free writing prospectus or any amendment or supplement thereto without the Representative's prior written consent, with such consent not to be unreasonably withheld, conditioned or delayed. The Company shall furnish to each Underwriter, without charge, as many copies of any free writing prospectus prepared by or on behalf of, used by or referred to by the Company as such Underwriter may reasonably request. If at any time when a prospectus is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) in connection with sales of the Securities (but in any event if at any time through and including the First Closing Date) there occurred or occurs an event or development as a result of which any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company conflicted or would conflict with the information contained in the Registration Statement or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at such time, not misleading, the Company shall promptly amend or supplement such free writing prospectus to eliminate or correct such conflict so that the statements in such free writing prospectus as so amended or supplemented

will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at such time, not misleading, as the case may be; provided, however, that prior to amending or supplementing any such free writing prospectus, the Company shall furnish to the Representative for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of such proposed amended or supplemented free writing prospectus, and the Company shall not file, use or refer to any such amended or supplemented free writing prospectus without the Representative's prior written consent, with such consent not to be unreasonably withheld, conditioned or delayed.

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

(e) Amendments and Supplements to Time of Sale Prospectus. If the Time of Sale Prospectus is being used to solicit offers to buy the Securities at a time when the Prospectus is not yet available to prospective purchasers, and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus so that the Time of Sale Prospectus does not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when delivered to a prospective purchaser, not misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable Law, the Company shall (subject to Section 3(b) and Section 3(c)) promptly prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when delivered to a prospective purchaser, not misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the information contained in the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable Law.

(f) Certain Notifications and Required Actions. After the date of this Agreement during the period when a prospectus relating to the Securities is required by the Securities Act to be delivered (whether through compliance with Rule 172 under the Securities Act or any similar rule) in connection with sales of the Securities by any Underwriter or dealer (the "Prospectus Delivery Period"), the Company shall promptly advise the Representative in writing (which may be by email) of: (i) the receipt of any comments of, or requests for additional or supplemental information from the Commission relating to the Registration Statement or the Prospectus; (ii) the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or the Prospectus; (iii) the time and date that any post-effective amendment to the Registration Statement becomes effective; and (iv) the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any

post-effective amendment thereto or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus or the Prospectus or of any order preventing or suspending the use of any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or the Prospectus, or of any proceedings to remove, suspend or terminate from listing or quotation the Shares from any securities exchange upon which they are listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time, the Company will use its best efforts to obtain the lifting of such order as soon as practicable. Additionally, the Company agrees that it shall comply with all applicable provisions of Rule 424(b), Rule 433 and Rule 430B under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under Rule 424(b) or Rule 433 were received in a timely manner by the Commission.

(g) Amendments and Supplements to the Prospectus and Other Securities Act Matters. If, during the Prospectus Delivery Period, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus so that the Prospectus does not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when the Prospectus is delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) to a purchaser, not misleading, or if in the opinion of the Representative or counsel for the Underwriters it is otherwise necessary to amend or supplement the Prospectus to comply with applicable Law, the Company agrees (subject to Section 3(b) and Section 3(c)) to promptly prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when the Prospectus is delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) to a purchaser, not misleading or so that the Prospectus, as amended or supplemented, will comply with applicable Law. Neither the Representative's consent to, nor delivery of, any such amendment or supplement shall constitute a waiver of any of the Company's obligations under Section 3(b) or Section 3(c).

(h) Blue Sky Compliance. The Company shall cooperate with the Representative and counsel for the Underwriters to qualify or register the Securities for sale under (or obtain exemptions from the application of) the state securities or blue sky Laws or Canadian provincial securities Laws of those jurisdictions designated by the Representative, shall comply with such Laws and shall continue such qualifications, registrations and exemptions in effect so long as required for the distribution of the Securities. The Company shall not be required to qualify as a foreign corporation or to take any action that would subject it to general service of process in any such jurisdiction where it is not presently qualified. The Company will advise the Representative promptly of the suspension of the qualification or registration of (or any such exemption relating to) the Securities for offering, sale or trading in any jurisdiction or any initiation or threat of any proceeding for any such purpose, and in the event of the issuance of any order suspending such qualification, registration or exemption, the Company shall use its best efforts to obtain the withdrawal thereof as soon as practicable.

(i) Use of Proceeds. The Company shall apply the net proceeds from the sale of the Securities sold by it in the manner described under the caption “Use of Proceeds” in the Registration Statement, the Time of Sale Prospectus and the Prospectus.

(j) Transfer Agent. The Company shall engage and maintain, at its expense, a registrar and transfer agent for the Shares.

(k) Earnings Statement. The Company will make generally available to its security holders and to the Representative as soon as practicable an earnings statement (which need not be audited) covering a period of at least twelve months beginning with the first fiscal quarter of the Company commencing after the date of this Agreement that will satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder; provided that the Company will be deemed to have furnished such statement to its stockholders to the extent it is filed on EDGAR.

(l) Continued Compliance with Securities Laws. The Company will comply with the Securities Act and the Exchange Act so as to permit the completion of the distribution of the Securities as contemplated by this Agreement, the Registration Statement, the Time of Sale Prospectus and the Prospectus. Without limiting the generality of the foregoing, the Company will, during the period when a prospectus relating to the Securities is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), file on a timely basis with the Commission and the Nasdaq all reports and documents required to be filed under the Exchange Act.

(m) Listing. The Company shall file a Listing of Additional Shares Notification Form with Nasdaq with respect to the Offered Shares and Warrant Shares.

(n) Company to Provide Copy of the Prospectus in Form That May be Downloaded from the Internet. If requested by the Representative, the Company shall cause to be prepared and delivered, at its expense, within one Business Day from the effective date of this Agreement, to the Representative, an “**electronic Prospectus**” to be used by the Underwriters in connection with the offering and sale of the Securities. As used herein, the term “**electronic Prospectus**” means a form of Time of Sale Prospectus, and any amendment or supplement thereto, that meets each of the following conditions: (i) it shall be encoded in an electronic format, satisfactory to the Representative, that may be transmitted electronically by the Representative and the other Underwriters to offerees and purchasers of the Securities; (ii) it shall disclose the same information as the paper Time of Sale Prospectus, except to the extent that graphic and image material cannot be disseminated electronically, in which case such graphic and image material shall be replaced in the electronic Prospectus with a fair and accurate narrative description or tabular representation of such material, as appropriate; and (iii) it shall be in or convertible into a paper format or an electronic format, satisfactory to the Representative, that will allow investors to store and have continuously ready access to the Time of Sale Prospectus at any future time, without charge to investors (other than any fee charged for subscription to the Internet as a whole and for on-line time). The Company hereby confirms that it has included or will include in the Prospectus filed pursuant to EDGAR or otherwise with the Commission and in the Registration Statement at the time it was declared effective an undertaking that, upon receipt of a request by an investor or his or her representative, the Company shall transmit or cause to be transmitted promptly, without charge, a paper copy of the Time of Sale Prospectus.

(o) Agreement Not to Offer or Sell Additional Shares. During the period commencing on and including the date hereof and continuing through and including the 60th day following the date of the Prospectus (such period being referred to herein as the “**Lock-up Period**”), the Company will not, without the prior written consent of the Representative (which consent may be withheld in its sole discretion), directly or indirectly: (i) sell, offer to sell, contract to sell or lend any Shares or Related Securities (as defined below); (ii) effect any short sale, or establish or increase any “put equivalent position” (as defined in Rule 16a-1(h) under the Exchange Act) or liquidate or decrease any “call equivalent position” (as defined in Rule 16a-1(b) under the Exchange Act) of any Shares or Related Securities; (iii) pledge, hypothecate or grant any security interest in any Shares or Related Securities; (iv) in any other way transfer or dispose of any Shares or Related Securities; (v) enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of any Shares or Related Securities, regardless of whether any such transaction is to be settled in securities, in cash or otherwise; (vi) announce the offering of any Shares or Related Securities; (vii) file any registration statement under the Securities Act in respect of any Shares or Related Securities (other than as contemplated by this Agreement); or (viii) publicly announce the intention to do any of the foregoing; provided, however, that the Company may (A) effect the transactions contemplated hereby, including the delivery of the Warrant Shares upon exercise of the Pre-Funded Warrants, (B) issue Shares or Related Securities, and Shares underlying Related Securities, each pursuant to any director or employee equity incentive plan, stock ownership plan, employee stock purchase plan, or dividend reinvestment plan of the Company in effect on the date hereof and described in the Registration Statement, the Time of Sale Prospectus and the Prospectus or pursuant to inducement grants within the meaning of Nasdaq Listing Rule 5635(c)(4), provided that the Company shall cause each newly appointed director or executive officer that is a recipient of such Shares or options to enter into a lock-up agreement with the Underwriters substantially in the form of Exhibit A hereto for the remainder of the Lock-up Period; (C) issue Shares pursuant to the vesting or exercise (including net exercise) of Related Securities as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus; (D) issue Shares or Related Securities in connection with a transaction with a third party that includes a bona fide commercial relationship (including joint ventures, marketing or distribution arrangements, collaboration agreements or intellectual property license agreements) or any acquisition of assets of not less than a majority or controlling portion of the equity of another entity, provided that (x) the aggregate number of Shares or Related Securities that the Company may sell or issue or agree to sell or issue shall not exceed 5% of the total number of Shares issued and outstanding as of the date of this Agreement and (y) each recipient of Shares or Related Securities shall execute a “lock-up” agreement with the Underwriters, substantially in the form of Exhibit A hereto, for the remainder of the Lock-up Period; (E) file a registration statement on Form S-8 relating to Shares or Related Securities granted (x) pursuant to the Company’s benefit plans described in the Registration Statement, the Time of Sale Prospectus and the Prospectus or (y) pursuant to inducement grants within the meaning of Nasdaq Listing Rule 5635(c)(4); (F) issue Shares in connection with sales under an “at-the-market” equity offering program pursuant to the Controlled Equity OfferingSM Sales Agreement (the “**Sales Agreement**”) between the Company and Cantor dated as of December 22, 2023, provided no sales shall be made under the Sales Agreement until the earlier of (i) the exercise in full by the Underwriters of their option to purchase additional shares of common stock or (ii) 30 days after the date of this Agreement; and (G) file one or more pre-effective amendments to the Company’s registration statement on Form S-3 filed with the Commission on October 2, 2025 with the SEC (File No. 333-290685) relating to Shares and Related Securities. For purposes of the

foregoing, “**Related Securities**” shall mean any options, restricted stock units, deferred stock units, warrants or other rights to acquire Shares or any securities exchangeable or exercisable for or convertible into Shares, or to acquire other securities or rights ultimately exchangeable or exercisable for, or convertible into, Shares.

(p) Future Reports to the Representative. During the period of five years hereafter, the Company will furnish to the Representative, c/o Cantor Fitzgerald & Co., at 110 East 59th Street, 6th Floor, New York, New York 10022, Attention: Equity Capital Markets, with copies to Cantor Fitzgerald & Co., 110 East 59th Street, 6th Floor, New York, New York 10022, Attention: General Counsel: (i) as soon as practicable after the end of each fiscal year, copies of the Annual Report of the Company containing the balance sheet of the Company as of the close of such fiscal year and statements of income, stockholders’ equity and cash flows for the year then ended and the opinion thereon of the Company’s independent public or certified public accountants; (ii) as soon as practicable after the filing thereof, copies of each proxy statement, Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other report filed by the Company with the Commission, FINRA or any securities exchange; and (iii) as soon as available, copies of any report or communication of the Company furnished or made available generally to holders of its capital stock; provided, however, that the requirements of this Section 3(p) shall be satisfied to the extent that such reports, statement, communications, financial statements or other documents are available on EDGAR.

(q) Investment Limitation. The Company shall not invest or otherwise use the proceeds received by the Company from its sale of the Securities in such a manner as would require the Company or any of its subsidiaries to register as an investment company under the Investment Company Act.

(r) No Stabilization or Manipulation; Compliance with Regulation M. The Company will not take, and will ensure that no affiliate of the Company will take, directly or indirectly, without giving effect to activities by the Underwriters, any action designed to or that might cause or result in stabilization or manipulation of the price of the Shares or any reference security with respect to the Shares, whether to facilitate the sale or resale of the Securities or otherwise, and the Company will, and shall cause each of its affiliates to, comply with all applicable provisions of Regulation M.

(s) Enforce Lock-Up Agreements. During the Lock-up Period, the Company will enforce all agreements between the Company and any of its security holders that restrict or prohibit, expressly or in operation, the offer, sale or transfer of Shares or Related Securities or any of the other actions restricted or prohibited under the terms of the form of Lock-up Agreement. In addition, the Company will direct the transfer agent to place stop transfer restrictions upon any such securities of the Company that are held on the books and records of the transfer agent that are bound by such “lock-up” agreements for the duration of the periods contemplated in such agreements, including “lock-up” agreements entered into by the Company’s executive officers and directors pursuant to Section 3(o) hereof.

(t) Warrant Shares Reserved. The Company shall, at all times while any Pre-Funded Warrants are 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 such Pre-Funded Warrants, the number of Warrant Shares that

are initially issuable and deliverable upon the exercise of the then outstanding Pre-Funded Warrants.

(u) Amendments and Supplements to Permitted Section 5(d) Communications. If at any time following the distribution of any Permitted Section 5(d) Communication, during the period when a prospectus relating to the Securities is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), there occurred or occurs an event or development as a result of which such Permitted Section 5(d) Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representative and will promptly amend or supplement, at its own expense, such Permitted Section 5(d) Communication to eliminate or correct such untrue statement or omission.

(v) Warrants. The Representative shall have received a form of Pre-Funded Warrant in form and substance reasonably acceptable to the Representative.

The Representative, on behalf of the several Underwriters, may, in its sole discretion, waive in writing the performance by the Company of any one or more of the foregoing covenants or extend the time for their performance.

4. Payment of Expenses. The Company agrees to pay all costs, fees and expenses incurred in connection with the performance of its obligations hereunder and in connection with the transactions contemplated hereby, including (i) all expenses incident to the issuance and delivery of the Securities (including all printing and engraving costs), (ii) all fees and expenses of the registrar and transfer agent of the Shares, (iii) all necessary issue, transfer and other stamp taxes in connection with the issuance and sale of the Securities to the Underwriters, (iv) all fees and expenses of the Company's counsel, independent public or certified public accountants and other advisors, (v) all costs and expenses incurred in connection with the preparation, printing, filing, shipping and distribution of the Registration Statement (including financial statements, exhibits, schedules, consents and certificates of experts), the Time of Sale Prospectus, the Prospectus, each free writing prospectus prepared by or on behalf of, used by, or referred to by the Company, and each preliminary prospectus, each Permitted Section 5(d) Communication, and all amendments and supplements thereto, and this Agreement, (vi) all filing fees, documented attorneys' fees and expenses incurred by the Company or the Underwriters in connection with qualifying or registering (or obtaining exemptions from the qualification or registration of) all or any part of the Securities for offer and sale under the state securities or blue sky Laws or the provincial securities Laws of Canada, and, if requested by the Representative, preparing and printing a "Blue Sky Survey" or memorandum and a "Canadian wrapper", and any supplements thereto, advising the Underwriters of such qualifications, registrations and exemptions, in an amount not to exceed \$7,500, (vii) the fees and expenses of the Underwriters (including the documented fees and expenses of the counsel to the Underwriters), payable on the First Closing Date, including the costs, fees and expenses incurred by the Underwriters in connection with determining their compliance with the rules and regulations of FINRA related to the Underwriters' participation in the offering and distribution of the Securities, and including any related filing fees and the legal fees of, and disbursements by, counsel to the Underwriters, provided that all such amounts payable under this subsection (vii) shall not exceed \$75,000 (viii) the costs and expenses

of the Company relating to investor presentations on any “road show”, any Permitted Section 5(d) Communication or any Section 5(d) Oral Communication undertaken in connection with the offering of the Shares, including expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the Representative, employees and officers of the Company and any such consultants, (ix) the fees and expenses associated with listing the Offered Shares and Warrant Shares on the Nasdaq, and (x) all other fees, costs and expenses of the nature referred to in Item 14 of Part II of the Registration Statement. Any such amount payable to the Underwriters may be deducted from the purchase price for the Securities. Except as provided in this Section 4 or in Section 7, Section 9 or Section 10, the Underwriters shall pay their own expenses, including the fees and disbursements of their counsel.

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

6. Conditions of the Obligations of the Underwriters. The respective obligations of the several Underwriters hereunder to purchase and pay for the Firm Securities as provided herein on the First Closing Date and, with respect to the Option Shares, each Option Closing Date, shall be subject to the accuracy of the representations and warranties on the part of the Company set forth in Section 1 as of the date hereof and as of the First Closing Date as though then made and, with respect to the Option Shares, as of each Option Closing Date as though then made, to the timely performance by the Company of its covenants and other obligations hereunder, and to each of the following additional conditions:

(a) Comfort Letter. On the date hereof, the Representative shall have received from PricewaterhouseCoopers LLP, independent registered public accountants for the Company, a letter dated the date hereof addressed to the Underwriters, in form and substance reasonably satisfactory to the Representative, containing statements and information of the type ordinarily included in accountant’s “comfort letters” to underwriters, delivered according to Statement of Auditing Standards No. 72 (or any successor bulletin), with respect to the audited and unaudited financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus, and each free writing prospectus, if any; *provided*, that such letter delivered on the date hereof shall use a “cut-off” date no more than two business days prior to the date of this Agreement.

(b) Compliance with Registration Requirements; No Stop Order; No Objection from FINRA. For a period from and after the date of this Agreement and through and including the First Closing Date and, with respect to any Option Shares purchased after the First Closing Date, each Option Closing Date:

(i) The Company shall have filed the Prospectus with the Commission (including the information required by Rule 430B under the Securities Act) in the manner and within the time period required by Rule 424(b) under the Securities Act; or the Company shall

have filed a post-effective amendment to the Registration Statement containing the information required by such Rule 430B, and such post-effective amendment shall have become effective.

(ii) No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment to the Registration Statement shall be in effect, and no proceedings for such purpose shall have been instituted or threatened by the Commission.

(iii) If a filing has been made with FINRA, FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.

(c) No Material Adverse Effect or Ratings Agency Change. For the period from and after the date of this Agreement and through and including the First Closing Date and, with respect to any Option Shares purchased after the First Closing Date, each Option Closing Date, in the judgment of the Representative there shall not have occurred any material adverse change in the authorized capital stock of the Company or any Material Adverse Effect or any development that would cause a Material Adverse Effect, or a downgrading in or withdrawal of the rating assigned to any of the Company's securities (other than asset backed securities) by any rating organization or a public announcement by any rating organization that it has under surveillance or review its rating of any of the Company's securities (other than asset backed securities), the effect of which, in the case of any such action by a rating organization described above, would cause a Material Adverse Effect.

(d) Opinion of Counsel for the Company. On each of the First Closing Date and each Option Closing Date the Representative shall have received the opinion and negative assurance letter of Hogan Lovells US LLP, counsel for the Company, dated as of such date, in form and substance reasonably satisfactory to the Representative.

(e) Opinion of Intellectual Property Counsel. On each of the First Closing Date and each Option Closing Date, the Representative shall have received the opinion of McCarter & English, LLP, counsel for the Company with respect to intellectual property matters, dated as of such date, in form and substance reasonably satisfactory to the Representative.

(f) Opinion of Counsel for the Underwriters. On each of the First Closing Date and each Option Closing Date the Representative shall have received the opinion and negative assurance letter of Cooley LLP, counsel for the Underwriters in connection with the offer and sale of the Securities, in form and substance reasonably satisfactory to the Representative, dated as of such date.

(g) Officers' Certificate. On each of the First Closing Date and each Option Closing Date, the Representative shall have received a certificate executed by the Chief Financial Officer of the Company and the Chief Legal Officer and Corporate Secretary, dated as of such date, to the effect set forth in Section 6(b)(ii) and further to the effect that:

(i) for the period from and including the date of this Agreement through and including such date, there has not occurred any Material Adverse Effect;

(ii) the representations, warranties and covenants of the Company set forth in Section 1 are true and correct with the same force and effect as though expressly made on and as of such date; and

(iii) the Company has complied with all the agreements hereunder and satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to such date.

(h) Chief Financial Officer's Certificate. On each of the First Closing Date and each Option Closing Date, the Representative shall have received a certificate executed by the Chief Financial Officer of the Company, in form and substance reasonably satisfactory to the Representative, dated as of such date.

(i) Bring-down Comfort Letter. On each of the First Closing Date and each Option Closing Date the Representative shall have received from PricewaterhouseCoopers LLP, independent registered public accountants for the Company, a letter dated such date, in form and substance reasonably satisfactory to the Representative, which letter shall: (i) reaffirm the statements made in the letter furnished by them pursuant to Section 6(a), except that the specified date referred to therein for the carrying out of procedures shall be no more than three Business Days prior to the First Closing Date or the applicable Option Closing Date, as the case may be; and (ii) cover certain financial information contained in the Prospectus.

(j) Lock-Up Agreements. On or prior to the date hereof, the Company shall have furnished to the Representative an agreement in the form of Exhibit A hereto from the directors and officers (as defined in Rule 16a-1(f) under the Exchange Act) set forth on Exhibit B hereto, and each such agreement shall be in full force and effect on each of the First Closing Date and each Option Closing Date.

(k) Rule 462(b) Registration Statement. In the event that a Rule 462(b) Registration Statement is filed in connection with the offering contemplated by this Agreement, such Rule 462(b) Registration Statement shall have been filed with the Commission on the date of this Agreement and shall have become effective automatically upon such filing.

(l) Nasdaq. The Company shall have submitted a listing of additional shares notification form to Nasdaq with respect to the Offered Shares and Warrant Shares and shall have received no objection thereto from Nasdaq.

(m) Additional Documents. On or before each of the First Closing Date and each Option Closing Date, the Representative and counsel for the Underwriters shall have received such information, documents and opinions as they may reasonably request for the purposes of enabling them to pass upon the issuance and sale of the Securities as contemplated herein, or in order to evidence the accuracy of any of the representations and warranties, or the satisfaction of any of the conditions or agreements, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Securities as contemplated herein and in connection with the other transactions contemplated by this Agreement shall be satisfactory in form and substance to the Representative and counsel for the Underwriters.

If any condition specified in this Section 6 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Representative by notice from the Representative to the Company at any time on or prior to the First Closing Date and, with respect to the Option Shares, at any time on or prior to the applicable Option Closing Date, which termination shall be without liability on the part of any party to any other party, except that Section 4, Section 7, Section 9 and Section 10 shall at all times be effective and shall survive such termination.

7. Reimbursement of Underwriters' Expenses. If this Agreement is terminated by the Representative pursuant to Section 6, Section 11 or Section 12, or if the sale to the Underwriters of the Securities on the First Closing Date is not consummated because of any refusal, inability or failure on the part of the Company to perform any agreement herein or to comply with any provision hereof, the Company agrees to reimburse the Representative and the other Underwriters (or such Underwriters as have terminated this Agreement with respect to themselves), severally, upon demand for all out-of-pocket expenses that shall have been reasonably incurred by the Representative and the Underwriters in connection with the proposed purchase and the offering and sale of the Securities, including fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges; provided that, in the event any such termination is effected after the First Closing Date but prior to any Option Closing Date with respect to the purchase of any Option Shares, the Company shall only reimburse the Underwriters for all of their out-of-pocket expenses including the reasonable fees and disbursements of counsel for the Underwriters incurred after the First Closing Date in connection with the proposed purchase of any such Option Shares; and provided further that, if this Agreement is terminated by the Representative pursuant to Section 11, the Company will have no obligation to reimburse any defaulting Underwriter.

8. Effectiveness of this Agreement. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

9. Indemnification.

(a) Indemnification of the Underwriters. The Company agrees to indemnify and hold harmless each Underwriter, its affiliates and their respective partners, members, directors, officers, employees and agents, and each person, if any, who controls each Underwriter or any affiliate within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, joint or several, arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading, or arising out of any untrue statement or alleged untrue statement of a material fact included in any preliminary prospectus, Time of Sale Prospectus, any free writing prospectus, any Marketing Material, any Section 5(d) Written Communication or the Prospectus (or any amendment or supplement to the foregoing), or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, joint or several, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any Governmental Authority, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 9(d)) any such settlement is effected with the written consent of the Company, which consent shall not unreasonably be delayed, conditioned or withheld; and

(iii) against any and all expense whatsoever, as incurred (including the fees and disbursements of counsel), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any Governmental Authority, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission (whether or not a party), to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made solely in reliance upon and in conformity with the Underwriter Information (as defined below).

(b) Indemnification of the Company, its Directors and Officers. Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, and its directors, each officer of the Company who signed the Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, against any and all loss, liability, claim, damage and expense described in the indemnity contained in Section 9(a), as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus, any Section 5(d) Written Communication or the Prospectus (or any amendment or supplement to the foregoing), in reliance upon and in conformity with information relating to such Underwriter and furnished to the Company in writing by such Underwriter or Underwriters expressly for use therein. The Company hereby acknowledges that the only information that the Underwriter or Underwriters has furnished to the Company expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus, any Section 5(d) Written Communication or the Prospectus (or any amendment or supplement to the foregoing) are the statements set forth in the first paragraph under the caption "Commission and Expenses," the information contained in the first and second paragraphs under the caption "Market Making, Stabilization and Other Transactions" and the information contained under the caption "Passive Market Making," in the "Underwriting" section in the Preliminary Prospectus and Prospectus (the "**Underwriter Information**").

(c) Notifications and Other Indemnification Procedures. Any party that proposes to assert the right to be indemnified under this Section 9 will, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 9, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it

might have to any indemnified party otherwise than under this Section 9 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 9 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any other legal expenses except as provided below and except for the reasonable costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party) or (4) the indemnifying party has not in fact employed counsel to assume the defense of such action or counsel reasonably satisfactory to the indemnified party, in each case, within a reasonable time after receiving notice of the commencement of the action; in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction (plus local counsel) at any one time for all such indemnified party or parties. All such fees, disbursements and other charges will be reimbursed by the indemnifying party promptly as they are incurred. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent. No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 9 (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent (1) includes an express and unconditional release of each indemnified party, in form and substance reasonably satisfactory to such indemnified party, from all liability arising out of such litigation, investigation, proceeding or claim and (2) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) Settlement Without Consent if Failure to Reimburse. If an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for reasonable fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 9(a)(ii) effected without its written consent if (1) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (2) such indemnifying party shall have received notice of the terms of such

settlement at least 30 days prior to such settlement being entered into and (3) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

10. Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of Section 9 is applicable in accordance with its terms but for any reason is held to be unavailable or insufficient from the Company or the Underwriters, the Company and the Underwriters will contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted) to which any indemnified party may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand. The relative benefits received by the Company on the one hand and the Underwriters on the other hand shall be deemed to be in the same proportion as the total net proceeds from the sale of the Securities (before deducting expenses) received by the Company bear to the total compensation received by the Underwriters (before deducting expenses) from the sale of the Securities on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable Law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and the Underwriters, on the other hand, with respect to the statements or omission that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 10 were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense, or damage, or action in respect thereof, referred to above in this Section 10 shall be deemed to include, for the purpose of this Section 10, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with Section 9(c). Notwithstanding the foregoing provisions of Section 9 and this Section 10, the Underwriters shall not be required to contribute any amount in excess of the commissions actually received by it under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 10, any person who controls a party to this Agreement within the meaning of the Securities Act, any affiliates of the respective Underwriters and any officers, directors, partners, employees or agents of the Underwriters or their respective affiliates, will have the same rights to contribution as that party, and each director of the Company and each officer of the Company who signed the Registration Statement will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 10, will notify any such party or

parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 10 except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 9(c), no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 9(c).

11. Default of One or More of the Several Underwriters. If, on the First Closing Date or any Option Closing Date, any one or more of the several Underwriters shall fail or refuse to purchase Offered Shares that it or they have agreed to purchase hereunder on such date, and the aggregate number of Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase does not exceed 10% of the aggregate number of the Offered Shares to be purchased on such date, the Representative may make arrangements satisfactory to the Company for the purchase of such Offered Shares by other persons, including any of the Underwriters, but if no such arrangements are made by such date, the other Underwriters shall be obligated, severally and not jointly, in the proportions that the number of Firm Shares set forth opposite their respective names on Schedule A bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as may be specified by the Representative with the consent of the non-defaulting Underwriters, to purchase the Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date. If, on the First Closing Date or any Option Closing Date, any one or more of the several Underwriters shall fail or refuse to purchase Offered Shares that it or they have agreed to purchase hereunder on such date, and the aggregate number of Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase exceeds 10% of the aggregate number of Offered Shares to be purchased on such date, and arrangements satisfactory to the Representative and the Company for the purchase of such Offered Shares are not made within 48 hours after such default, this Agreement shall terminate without liability of any party to any other party except that the provisions of Section 4, Section 7, Section 9 and Section 10 shall at all times be effective and shall survive such termination. In any such case either the Representative or the Company shall have the right to postpone the First Closing Date or the applicable Option Closing Date, as the case may be, but in no event for longer than seven days in order that the required changes, if any, to the Registration Statement and the Prospectus or any other documents or arrangements may be effected.

As used in this Agreement, the term “**Underwriter**” shall be deemed to include any person substituted for a defaulting Underwriter under this Section 11. Any action taken under this Section 11 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

12. Termination of this Agreement. Prior to the purchase of the Firm Shares by the Underwriters on the First Closing Date, this Agreement may be terminated by the Representative by notice given to the Company if at any time: (i) trading or quotation in any of the Company’s securities shall have been suspended or limited by the Commission or by the Nasdaq, or trading in securities generally on either the Nasdaq or the NYSE shall have been suspended or limited, or minimum or maximum prices shall have been generally established on any of such stock exchanges; (ii) a general banking moratorium shall have been declared by any of federal, New

York or Delaware authorities; (iii) there shall have occurred any outbreak or escalation of national or international hostilities or any crisis or calamity, or any change in the United States or international financial markets, or any substantial change or development involving a prospective substantial change in United States' or international political, financial or economic conditions, as in the judgment of the Representative is material and adverse and makes it impracticable to market the Securities in the manner and on the terms described in the Time of Sale Prospectus or the Prospectus or to enforce contracts for the sale of securities; (iv) in the judgment of the Representative there shall have occurred any Material Adverse Effect; or (v) the Company shall have sustained a loss by strike, fire, flood, earthquake, accident or other calamity of such character as in the judgment of the Representative may interfere materially with the conduct of the business and operations of the Company regardless of whether or not such loss shall have been insured. Any termination pursuant to this Section 12 shall be without liability on the part of (a) the Company to any Underwriter, except that the Company shall be obligated to reimburse the expenses of the Representative and the Underwriters pursuant to Section 4 or Section 7 hereof or (b) any Underwriter to the Company; provided, however, that the provisions of Section 9 and Section 10 shall at all times be effective and shall survive such termination.

13. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) the purchase and sale of the Securities pursuant to this Agreement, including the determination of the public offering price of the Securities and any related discounts and commissions, is an arm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, (b) in connection with the offering contemplated hereby and the process leading to such transaction, each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company, or its stockholders, or its creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering contemplated hereby or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company on other matters) and no Underwriter has any obligation to the Company with respect to the offering contemplated hereby except the obligations expressly set forth in this Agreement, (d) the Underwriters and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company, and (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering contemplated hereby and the Company has consulted its own legal, accounting, regulatory and tax advisors to the extent it deemed appropriate.

14. Representations and Agreements to Survive Delivery. The respective indemnities, agreements, representations, warranties and other statements of the Company, its officers and the several Underwriters set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by or on behalf of any Underwriter or the Company or any of its or their partners, affiliates, officers, directors or employees or any controlling person, as the case may be, and, anything herein to the contrary notwithstanding, will survive delivery of and payment for the Securities sold hereunder and any termination of this Agreement.

15. Notices. All communications hereunder shall be in writing and shall be mailed, hand delivered or telecopied and confirmed to the parties hereto as follows:

If to the Representative:

Cantor Fitzgerald & Co.
110 East 59th Street
New York, NY 10022
Attention: General Counsel
Email: [***];[***]

with a copy to:

Cooley LLP
55 Hudson Yards,
New York, NY 10001
Attention: Daniel I. Goldberg, Esq. and Darah Protas, Esq.
Email: [***]; [***]

If to the Company:

Invivyd, Inc.
209 Church Street
New Haven, CT 06510
Attention: William Duke, Jr., Chief Financial Officer
Email: [***]

with a copy to:

Invivyd, Inc.
209 Church Street
New Haven, CT 06510
Attention: Jill Andersen, Chief Legal Officer
Email: [***]

and

Hogan Lovells US LLP
1735 Market Street, 23rd Floor
Philadelphia, PA 19103
Attention: Steven J. Abrams, Esq.; Stephen M. Nicolai, Esq.
Email: steve.abrams@hoganlovells.com;
stephen.nicolai@hoganlovells.com

Each party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose. Each such notice or other communication shall be deemed given (i) when delivered personally or by verifiable facsimile transmission (with an original to follow) on or before 4:30 p.m., New York City time, on a Business Day or, if such day is not a Business Day, on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier, (iii) on the Business Day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid), or (iv) by Electronic Notice, as set forth in Section 16.

16. Electronic Notice. An electronic communication (“**Electronic Notice**”) shall be deemed written notice for purposes of Section 15 if sent to the electronic mail address specified by the receiving party as set forth in Section 15 or under separate cover. Electronic Notice shall

be deemed received at the time the party sending Electronic Notice receives verification of receipt by the receiving party. Any party receiving Electronic Notice may request and shall be entitled to receive the notice on paper, in a nonelectronic form (“**Nonelectronic Notice**”) which shall be sent to the requesting party within ten (10) days of receipt of the written request for Nonelectronic Notice.

17.Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Company and the Underwriters and their respective successors and the parties referred to in Section 11. References to any of the parties contained in this Agreement shall be deemed to include the successors and permitted assigns of such party. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. Neither party may assign its rights or obligations under this Agreement without the prior written consent of the other party; provided, however, that the Representative may assign its rights and obligations hereunder to an affiliate thereof without obtaining the Company’s consent.

18.Partial Unenforceability. The invalidity or unenforceability of any section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other section, paragraph or provision hereof. If any section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

19.Entire Agreement; Amendment; Severability; Waiver. This Agreement (including all schedules and exhibits attached hereto issued pursuant hereto) constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties hereto with regard to the subject matter hereof. Neither this Agreement nor any term hereof may be amended except pursuant to a written instrument executed by the Company and the Representative. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable as written by a court of competent jurisdiction, then such provision shall be given full force and effect to the fullest possible extent that it is valid, legal and enforceable, and the remainder of the terms and provisions herein shall be construed as if such invalid, illegal or unenforceable term or provision was not contained herein, but only to the extent that giving effect to such provision and the remainder of the terms and provisions hereof shall be in accordance with the intent of the parties as reflected in this Agreement. No implied waiver by a party shall arise in the absence of a waiver in writing signed by such party. No failure or delay in exercising any right, power, or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any right, power, or privilege hereunder.

20.GOVERNING LAW AND TIME; WAIVER OF JURY TRIAL. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAWS. SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME. EACH PARTY HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO

TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

21. CONSENT TO JURISDICTION. EACH PARTY HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE CITY OF NEW YORK, BOROUGH OF MANHATTAN, FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH ANY TRANSACTION CONTEMPLATED HEREBY, 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, THAT SUCH SUIT, ACTION OR PROCEEDING IS BROUGHT IN AN INCONVENIENT FORUM OR THAT THE VENUE OF SUCH SUIT, ACTION OR PROCEEDING IS IMPROPER. EACH PARTY 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 (CERTIFIED OR REGISTERED MAIL, RETURN RECEIPT REQUESTED) TO SUCH PARTY AT THE ADDRESS IN EFFECT FOR NOTICES TO IT UNDER THIS AGREEMENT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW.

22. 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. Delivery of an executed Agreement by one party to the other may be made by facsimile or electronic transmission.

23. Construction.

- (a) the section and exhibit headings herein are for convenience only and shall not affect the construction hereof;
- (b) words defined in the singular shall have a comparable meaning when used in the plural, and vice versa;
- (c) the words “hereof,” “hereto,” “herein” and “hereunder” and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole and not to any particular provision of this Agreement;
- (d) wherever the word “include,” “includes” or “including” is used in this Agreement, it shall be deemed to be followed by the words “without limitation”;
- (e) references herein to any gender shall include each other gender;
- (f) references herein to any law, statute, ordinance, code, regulation, rule or other requirement of any Governmental Authority shall be deemed to refer to such law, statute, ordinance, code, regulation, rule or other requirement of any Governmental Authority as amended,

reenacted, supplemented or superseded in whole or in part and in effect from time to time and also to all rules and regulations promulgated thereunder;

(g) if the last day for the giving of any notice or the performance of any act required or permitted under this Agreement is a day that is not a Business Day, then the time for the giving of such notice or the performance of such action shall be extended to the next succeeding Business Day;

(h) “**knowledge**” means, as it pertains to the Company, the actual knowledge of the officers and directors of the Company, together with the knowledge which they would have had if they had conducted a reasonable inquiry of the relevant persons into the relevant subject matter;

(i) “**Governmental Authority**” means (i) any federal, provincial, state, local, municipal, national or international government or governmental authority, regulatory or administrative agency, governmental commission, department, board, bureau, agency or instrumentality, court, tribunal, arbitrator or arbitral body (public or private); (ii) any self-regulatory organization; or (iii) any political subdivision of any of the foregoing;

(j) “**Law**” means any and all laws, including all federal, state, local, municipal, national or foreign statutes, codes, ordinances, guidelines, decrees, rules, regulations and by-laws and all judicial, arbitral, administrative, ministerial, departmental or regulatory judgments, orders, directives, decisions, rulings or awards or other requirements of any Governmental Authority, binding on or affecting the person referred to in the context in which the term is used and rules, regulations and policies of any stock exchange on which securities of the Company are listed for trading; and

(k) “**Business Day**” means any day on which Nasdaq and commercial banks in the City of New York are open for business.

24. General Provisions.

Each of the parties hereto acknowledges that it is a sophisticated business person who was adequately represented by counsel during negotiations regarding the provisions hereof, including the indemnification provisions of Section 9 and the contribution provisions of Section 10, and is fully informed regarding said provisions. Each of the parties hereto further acknowledges that the provisions of Section 9 and Section 10 hereof fairly allocate the risks in light of the ability of the parties to investigate the Company, its affairs and its business in order to assure that adequate disclosure has been made in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, each free writing prospectus and the Prospectus (and any amendments and supplements to the foregoing), as contemplated by the Securities Act and the Exchange Act.

[*Signature Page Follows*]

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

Very truly yours,

INVIVYD, INC.

By: /s/ William Duke, Jr.
Name: William Duke, Jr.
Title: Chief Financial Officer

ACCEPTED as of the date first-above written:

CANTOR FITZGERALD & CO.

By: /s/ Jason Fenton
Name: Jason Fenton
Title: Managing Director, co-head equity capital
markets

For itself and the other several Underwriters named in Schedule A to this Agreement.

SIGNATURE PAGE

INVIVYD, INC. – UNDERWRITING AGREEMENT

SCHEDULE A

Underwriters	Number of Firm Shares to be Purchased	Number of Pre-Funded Warrants
Cantor Fitzgerald & Co.	37,400,000	5,100,000
H.C. Wainwright & Co., LLC	6,600,000	900,000
Total	<u>44,000,000</u>	<u>6,000,000</u>

SCHEDULE B

Free Writing Prospectuses Included in the Time of Sale Prospectus

Free Writing Prospectus, dated November 17, 2025

SCHEDULE C

Pricing Information

Firm Shares: 44,000,000

Pre-Funded Warrants: 6,000,000

Option Shares: 7,500,000

Price to Public per Firm Share: \$2.50

Price to Public per Pre-Funded Warrant: \$2.4999

Underwriters' Discount per Share and Pre-Funded Warrant: \$0.15

SCHEDULE D

Permitted Section 5(d) Communications

None

Form of Lock-up Agreement

November __, 2025

Cantor Fitzgerald & Co.

As Representative of the Several Underwriters

c/o Cantor Fitzgerald & Co.
110 East 59th Street, 6th Floor
New York, NY 10022

Re: Proposed Registered Follow-On Offering by Invivyd, Inc.

Ladies and Gentlemen:

The undersigned, a securityholder and/or officer and/or a director of Invivyd, Inc., a Delaware corporation (the "Company"), understands that the Company proposes to enter into an Underwriting Agreement (the "Underwriting Agreement") with Cantor Fitzgerald & Co. ("CF&Co.") as representative of the several underwriters named therein (the "Representative") relating to the proposed registered follow-on offering (the "Offering") of shares of the Company's common stock, par value \$0.0001 per share (the "Common Stock"). The undersigned acknowledges that CF&Co. is relying on the representations and agreements of the undersigned contained in this lock-up agreement in conducting the Offering and, at a subsequent date, in entering into the Underwriting Agreement and other underwriting arrangements with the Company with respect to the Offering.

In recognition of the benefit that the Offering will confer upon the undersigned as a securityholder and/or officer and/or a director of the Company, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees that, during the period beginning on the date hereof and ending on the date that is 60 days from the date of the Underwriting Agreement (the "Lock-Up Period"), the undersigned will not (and will cause any immediate family member not to), without the prior written consent of CF&Co., which may withhold its consent in its sole discretion, directly or indirectly, (i) sell, offer to sell, contract to sell or lend, effect any short sale or establish or increase a Put Equivalent Position (as defined in Rule 16a-1(h) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) or liquidate or decrease any Call Equivalent Position (as defined in Rule 16a-1(b) under the Exchange Act), pledge, hypothecate or grant any security interest in, or in any other way transfer or dispose of, any Common Stock or any securities convertible into or exchangeable or exercisable for Common Stock, in each case whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition (collectively, the "Lock-Up Securities"), (ii) make any demand for, or exercise any right with respect to the registration of any of the Lock-Up Securities, or the filing of any

registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) in connection therewith, under the Securities Act of 1933, as amended (the “Securities Act”), (iii) enter into any swap, hedge or any other agreement or any transaction that transfers, in whole or in part, the economic consequence of ownership of the Lock-Up Securities, whether any such swap or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise, or (iv) publicly announce the intention to do any of the foregoing.

Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer the Lock-Up Securities pursuant to clauses (i) through (iv) below without the prior written consent of CF&Co., provided that (1) prior to any such transfer, CF&Co. receives a signed lock-up agreement, substantially in the form of this lock-up agreement, for the balance of the Lock-Up Period from each donee, trustee, distributee or transferee, as the case may be, (2) any such transfer shall not involve a disposition for value, (3) in the case of clauses (i) through (iii) below, such transfers are not required to be reported with the Securities and Exchange Commission under the Exchange Act, and (4) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfers:

(i) as a bona fide gift or gifts, charitable contribution or for bona fide estate planning purposes; or

(ii) to any immediate family member or to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned; or

(iii) pursuant to a qualified domestic order or in connection with a divorce settlement; or

(iv) by will or intestate succession to the legal representative, heir, beneficiary or immediate family of the undersigned upon the death of the undersigned.

Furthermore, no provision in this lock-up agreement shall be deemed to restrict or prohibit (1) the exercise or exchange by the undersigned of any options to purchase shares of Common Stock, including the sales or transfers of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock upon the exercise of options to purchase the Company’s securities for cash or on a “cashless” or “net exercise” basis to cover the exercise price and/or tax withholding obligations of the undersigned in connection with such exercise, pursuant to any stock option, stock bonus or other stock plan or arrangement, each as described in the prospectus supplement relating to the Offering; provided, however, that the underlying shares of Common Stock shall continue to be subject to the restrictions on transfer set forth in this lock-up agreement and that any filing under Section 16 of the Exchange Act made in connection with such exercise or exchange shall clearly indicate in the footnotes thereto that (i) the filing relates to the circumstances described in this clause (1) and (ii) the purpose of such sale or transfer was to cover the exercise price and/or tax withholding obligations, as applicable, of the undersigned in connection with such exercise; and (2) the transfer of Lock-Up Securities upon the completion of a bona fide third-party tender offer, merger, consolidation or other similar transaction that is approved by the Board of Directors of the Company and made to all holders of the Company’s securities involving a change of control of the Company; provided, however, that in the event that

such tender offer, merger, consolidation or other such transaction is not completed, such Lock-Up Securities held by the undersigned shall remain subject to the restrictions on transfer set forth in this lock-up agreement. For purposes hereof, “change of control” shall mean the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons, of shares of capital stock if, after such transfer, such person or group of affiliated persons would hold at least a majority of the outstanding voting securities of the Company (or the surviving entity).

Notwithstanding anything herein to the contrary, nothing herein shall prevent the undersigned from establishing a 10b5-1 trading plan that complies with Rule 10b5-1 under the Exchange Act (a “10b5-1 Trading Plan”) or from amending an existing 10b5-1 Trading Plan so long as there are no sales of Lock-Up Securities under any such 10b5-1 Trading Plan during the Lock-Up Period; and provided that, the establishment of a 10b5-1 Trading Plan or the amendment of a 10b5-1 Trading Plan shall only be permitted if (1) the establishment or amendment of such plan is not required to be reported in any public report or filing with the Commission, or otherwise, during the Lock-Up Period and (2) the undersigned does not otherwise voluntarily effect any public filing or report regarding the establishment or amendment of such plan during the Lock-Up Period.

Moreover, no provision in this lock-up agreement shall be deemed to restrict or prohibit the sale of Common Stock, at any time on or after the date of the Underwriting Agreement, pursuant to an existing trading plan that was established prior to the execution of this lock-up agreement by the undersigned (“Existing 10b5-1 Trading Plan”), providing for the sale of Common Stock by the undersigned, which trading plan meets the requirements of Rule 10b5-1(c) under the Exchange Act (including sell-to-cover transactions effected to satisfy the payment of withholding tax liability incurred upon the vesting of restricted stock units), provided the existence and details of such Existing 10b5-1 Trading Plan were communicated to the Representative and such Existing 10b5-1 Trading Plan will not be amended or otherwise modified during the Lock-Up Period; provided, further, that if the undersigned reports any such sale on a Form 4 filed with the Commission, the undersigned shall cause such Form 4 to include a statement that such sale was effected pursuant to such Existing 10b5-1 Trading Plan.

The undersigned further agrees that the foregoing provisions shall be equally applicable to any Common Stock the undersigned may purchase or otherwise receive in the Offering.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company’s transfer agent and registrar against the transfer of the Lock-Up Securities except in compliance with the foregoing restrictions.

With respect to the Offering only, the undersigned waives any registration rights relating to registration under the Securities Act of the offer and sale of any shares of Common Stock and/or any options or warrants or other rights to acquire Common Stock or any securities exchangeable or exercisable for or convertible into Common Stock, or to acquire other securities or rights ultimately exchangeable or exercisable for or convertible into Common Stock, owned either of record or beneficially by the undersigned, including any rights to receive notice of the Offering.

The undersigned confirms that the undersigned has not, and has no knowledge that any immediate family member has, directly or indirectly, taken any action designed to or that might reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale of the Common Stock. The undersigned will not, and will cause any immediate family member not to take, directly or indirectly, any such action.

As used herein, “immediate family” shall mean the spouse, domestic partner, lineal descendant, father, mother, brother, sister, or any other person with whom the undersigned has a relationship by blood, marriage or adoption not more remote than first cousin.

The undersigned represents and warrants that the undersigned has full power, capacity and authority to enter into this lock-up agreement. This lock-up agreement is irrevocable and will be binding on the undersigned and the successors, heirs, personal representatives and assigns of the undersigned.

This lock-up agreement shall be governed by and construed in accordance with the laws of the State of New York.

The undersigned acknowledges and agrees that the underwriters have not provided any recommendation or investment advice nor have the underwriters solicited any action from the undersigned with respect to the Offering of the Common Stock and the undersigned has consulted their own legal, accounting, financial, regulatory and tax advisors to the extent deemed appropriate. The undersigned further acknowledges and agrees that, although the Representative may be required or choose to provide certain Regulation Best Interest and Form CRS disclosures to you in connection with the Offering, the Representative and the other underwriters are not making a recommendation to you to enter into this lock-up agreement, and nothing set forth in such disclosures is intended to suggest that the Representative or any underwriter is making such a recommendation.

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

This lock-up agreement shall automatically terminate, and the undersigned shall be released from its obligations hereunder, upon the earliest to occur, if any, of (i) the Company advising CF&Co. in writing, prior to the execution of the Underwriting Agreement, that it has determined not to proceed with the Offering, (ii) the executed Underwriting Agreement being terminated prior to the closing of the Offering (other than the provisions thereof that survive termination), and (iii) November 30, 2025, in the event that the Underwriting Agreement has not been executed by such date.

The undersigned hereby represents and warrants that the undersigned has full power, capacity and authority to enter into this lock-up agreement. This lock-up agreement is irrevocable and will be binding on the undersigned and the successors, heirs, personal representatives and assigns of the undersigned. This lock-up agreement may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g.,

www.docusign.com or www.echosign.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.

[Signature Page Follows]

Very truly yours,

Name of Director/Officer
(Print exact name)

By: _____
Signature

Parties to Lock-up Agreement

Executive Officers

- Robert Allen
- Jill Andersen
- William Duke, Jr.
- Julie Green
- Timothy Lee

Directors

- Tamsin Berry
 - Marc Elia
 - Paul B. Bolno, M.D.
 - Terrance McGuire
 - Kevin F. McLaughlin
 - Ajay Royan
-

FORM OF PRE-FUNDED WARRANT TO PURCHASE COMMON STOCK

Number of Shares: [●] (subject to adjustment)

Warrant No. [●]

Original Issue Date: [●], 2025

Invivyd, 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 registered 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 (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**”), subject to the following terms and conditions:

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

“**Affiliate**” means any Person directly or indirectly controlled by, controlling or under common control with, a Holder, but only for so long as such control shall continue. For purposes of this definition, “control” (including, with correlative meanings, “controlled by”, “controlling” and “under common control with”) means, with respect to a Person, possession, direct or indirect, of (i) the power to direct or cause direction of the management and policies of such Person (whether through ownership of securities or partnership or other ownership interests, by contract or otherwise), or (ii) at least 50% of the voting securities (whether directly or pursuant to any option, warrant or other similar arrangement) or other comparable equity interests.

“**Attribution Parties**” means, collectively, the following Persons and entities: (i) any direct or indirect Affiliates of the Holder, (ii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any Attribution Parties and (iii) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and/or any 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.

“**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. 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 Board of Directors’ determination 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.

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

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

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

“**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.

“**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 Market.

“**Registration Statement**” means the Company’s Registration Statement on Form S-3 (File No. 333-267643), declared effective on October 5, 2022.

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

“**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, for the Principal Trading Market 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+1.”

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

“**Transfer Agent**” means Equiniti Trust Company, LLC, the Company’s transfer agent and registrar for the Common Stock, and any successor appointed in such capacity.

- 2. Issuance of Securities; Registration of Warrants.** This Warrant, as initially issued by the Company, is offered and sold pursuant to the Registration Statement. As of the Original Issue Date, the Warrant Shares are issuable under the Registration Statement. Accordingly, the Warrant and, assuming issuance pursuant to the Registration Statement or an exchange meeting the requirements of Section 3(a)(9) of the Exchange Act as in effect on the Original Issue Date, the Warrant Shares, are not considered “restricted securities” under Rule 144 promulgated under the Securities Act. 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 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). 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 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 of Warrants.**

- (a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by this Warrant (including Section 11) at any time and from time to time on or after the Original Issue Date, and such rights shall not expire until exercised in full.
- (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.
- (c) The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this section, 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, 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, cause the Transfer Agent to credit such
-

aggregate number of shares of Common Stock specified by the Holder in the Exercise Notice and to which the Holder is entitled pursuant to such exercise (the “**Exercise Shares**”) to (i) the Holder’s or its designee’s balance account with The Depository Trust Company (“**DTC**”) through its Deposit Withdrawal At Custodian system, assuming the Transfer Agent is then a participant in the DTC Fast Automated Securities Transfer Program (the “**FAST Program**”) or (ii) in book entry form via a direct registration system (“**DRS**”) maintained by or on behalf of the Transfer Agent, in each case so long as either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or the resale of such Warrant Shares by the Holder or (B) the Exercise Shares are eligible for resale by the Holder without volume or manner-of-sale restrictions pursuant to Rule 144 promulgated under the Securities Act (assuming cashless exercise of this Warrant). If the Transfer Agent is not a participant in the FAST Program or if (A) and (B) above are not true, the Company shall cause the Transfer Agent to either (i) record the Exercise Shares in the name of the Holder or its designee on the certificates reflecting the Exercise Shares with an appropriate legend regarding restriction on transferability, which shall be issued and dispatched by overnight courier to the address as specified in the Exercise Notice, and on the Company’s share register or (ii) issue such Exercise Shares in the name of the Holder or its designee in restricted book-entry form in the Company’s share register. The Holder, or any Person 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 DTC account, the date of the book entry positions or the date of delivery of the certificates evidencing such Exercise Shares, as the case may be.

- (b) If the Company fails to cause the Transfer Agent to deliver to the Holder or its designee Exercise Shares in the manner required pursuant to Section 5(a), within the Standard Settlement Period following the Exercise Date (other than a failure caused by incorrect or incomplete information provided by the Holder to the Company) and the Holder or the Holder’s broker on its behalf 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**”) but did not receive within the Standard Settlement Period, then the Company shall, within two (2) Trading Days after the Holder’s request and in the Holder’s sole discretion, promptly honor its obligation to deliver to the Holder or its designee the Exercise Shares pursuant to Section 5(a) and pay cash to the Holder in an amount equal to the excess (if any) of the 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 (A) the number of shares of Common Stock purchased in the Buy-In, times (B) the Closing Sale Price of a share of Common Stock on the Exercise Date. The Holder shall provide the Company written notice promptly after the occurrence of a Buy-In, indicating the amounts payable to the Holder in respect of the Buy-In together with applicable confirmations and other evidence reasonably requested by the Company.
 - (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 Exercise Shares; provided, however, that the Holder shall not be entitled to both (i) require the Company to reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not timely honored and (ii) receive the number of shares of Common Stock that would have been issued if the Company had timely complied with its delivery requirements under Section 5(a).

6. **Charges, Taxes and Expenses**. Issuance and delivery of Exercise Shares 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 contractual indemnity, if requested by the Company. 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 initially issuable and deliverable upon the exercise of this entire Warrant, 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 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 actions 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.
-

9. **Certain Adjustments.** The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant (the “**Number of Warrant Shares**”) 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), (iii) or (iv) of this paragraph shall become effective immediately after the effective date of such subdivision, combination or issuance.
- (b) Pro Rata Distributions. If, on or after the Original Issue Date, the Company, at any time while this Warrant is outstanding, shall declare or make any dividend or other pro rata distribution of its assets (or rights to acquire its assets) to all holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction, but, for the avoidance of doubt, excluding any distribution of shares of Common Stock subject to Section 9(a), any distribution of Purchase Rights (as defined below) subject to Section 9(c) and any Fundamental Transaction (as defined below) subject to Section 9(d)), (a “**Distribution**”) 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 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 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) Purchase Rights. If at any time on or after the Original Issue Date, the Company, at any time while this Warrant is outstanding, grants any rights to purchase stock, warrants, securities or other property, in each case pro rata to all record holders of any class of Common Stock (the “**Purchase Rights**”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant of such Purchase Rights (*provided*, that to the extent that the Holder’s right to participate in any such Purchase Right 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 Purchase Right to such extent (and shall not be entitled to beneficial ownership of such Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as 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 such right (and any Purchase Right granted on such initial Purchase Right or on any subsequent Purchase Right to be held similarly in abeyance) to the same extent as if there had been no such limitation).
- (d) 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 and in which 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 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), provided, however, the foregoing shall not include transactions for which the primary purpose is raising capital, 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 then issuable upon exercise in full of this Warrant (including any Distributions or Purchase Rights then held in abeyance pursuant to Sections 9(b) or 9(c) above) without regard to any limitations on exercise contained herein. In the event the Holder does not exercise this Warrant as contemplated by the foregoing sentence, this Warrant shall be deemed exercised in full without regard to any limitations on exercise contained herein pursuant to the “cashless exercise” provision in Section 10 below upon the effective date of the consummation of such Fundamental Transaction.

- (e) Number of Warrant Shares. Simultaneously with any adjustment to the Number of Warrant Shares pursuant to this 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.
 - (f) Calculations. All calculations under this Section 9 shall be made to the nearest one-tenth of one cent or the nearest share, as applicable.
 - (g) 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 Company’s transfer agent.
 - (h) 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 the event such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall (on the
-

same time frame set forth in the immediately prior sentence) offer the Holder the ability to sign a confidentiality agreement related thereto sufficient to allow the Holder to receive such notice, and the Company shall deliver such notice immediately upon execution of such confidentiality agreement. If the Holder does not sign the confidentiality agreement, then the Holder shall not receive 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(d), other than a Fundamental Transaction under clause (iii) of Section 9(d), 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. The Holder agrees to maintain any information disclosed pursuant to this Section 9(h) in confidence until such information is publicly available, and shall comply with applicable law with respect to trading in the Company's securities following receipt of any such information.

- 10. Payment of Exercise Price.** Notwithstanding anything contained herein to the contrary, the Holder may, in its sole discretion, satisfy its obligation to pay the Exercise Price through a "cashless exercise", in which event 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, as 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 of the shares of Common Stock as of the Trading Day on the date immediately preceding the Exercise Date; and

"B" equals the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in a "cashless exercise" transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the Original Issue Date (*provided* that the Commission continues to take the position that such treatment is proper at the time of such exercise). In the event that the Registration Statement or another registration statement registering the issuance of Warrant Shares is, for any reason, not effective at the time of exercise of this Warrant, then this Warrant may only be exercised through a cashless exercise, as set forth in this Section 10. If the Warrant Shares are issued in such a cashless exercise, the Company acknowledges and agrees that, in accordance with Section 3(a)(9) of the Securities Act, the Exercise Shares issued in such exercise shall take on the registered characteristics of the Warrants being exercised and may be tacked on to the holding period of the Warrants being exercised. Except as set forth in

Section 5(b) (Buy-In remedy) and Section 12 (No Fractional Shares), in no event will the exercise of this Warrant be settled in cash.

11. Limitations on Exercise.

- (a) Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder of this Warrant shall not exercise or have the right to exercise any portion of this Warrant, and any such exercise shall be null and void ab initio and treated as if the exercise had not been made, to the extent that immediately prior to or following such exercise, the Holder, together with the Attribution Parties, beneficially owns or would beneficially own as determined in accordance with Section 13(d) of the Exchange Act and the rules promulgated thereunder, in excess of [4.99%][9.99%] (the “**Maximum Percentage**”) of the Common Stock that would be issued and outstanding following such exercise. For purposes of calculating beneficial ownership for determining whether the Maximum Percentage is or will be exceeded, the aggregate number of shares of Common Stock held and/or beneficially owned by the Holder together with the Attribution Parties, shall include the number of shares of Common Stock held and/or beneficially owned by the Holder together with the Attribution Parties plus the number of shares of Common Stock issuable upon exercise of the relevant Warrant with respect to which the determination is being made but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, unexercised Warrant held and/or beneficially owned by the Holder or the Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company held and/or beneficially owned by such Holder or any Attribution Party (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 of the Holder or the Attribution Parties shall, except as set forth in the immediately preceding sentence, be calculated and determined in accordance with Section 13(d) of the Exchange Act and the rules promulgated thereunder. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock, a Holder of this Warrant 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 Commission, as the case may be, (2) a more recent public announcement by the Company or (3) any other notice by the Company or the Company’s transfer agent setting forth the number of shares of Common Stock outstanding (such issued and outstanding shares, the “**Reported Outstanding Share Number**”). For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Trading Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. The Holder shall disclose to the Company the number of shares of Common Stock that it, together with the Attribution Parties holds and/or beneficially owns and has the right to acquire through the exercise of derivative securities and any limitations on exercise or conversion analogous to the limitation contained herein contemporaneously or immediately prior to submitting an Exercise Notice for the relevant Warrant. 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, together with the
-

Attribution Parties', 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. 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 the Attribution Parties 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, together with the 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, together with the 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 and/or the Attribution Parties 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, a Holder of this Warrant may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 19.99% specified in such notice; *provided* that any increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and shall not negatively affect any partial exercise effected prior to such change.

- (b) This Section 11 shall not restrict the number of shares of Common Stock which a Holder or the Attribution Parties may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder or the Attribution Parties may receive in the event of a Fundamental Transaction as contemplated in Section 9(c) of this Warrant. 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 or the Attribution Parties for any purpose including for purposes of Section 13(d) of the Exchange Act and the rules promulgated thereunder or Section 16 of the Exchange Act and the rules promulgated thereunder, including Rule 16a-1(a)(1). 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 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 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.

- 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.** Any and all notices or other communications or deliveries hereunder (including, without limitation, any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via e-mail at the e-mail address specified by the Company or in the books and records of the Transfer Agent prior to 5:30 P.M., New York City time, on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via e-mail at the e-mail address specified by the Company or in the books and records of the Transfer Agent on a day that is not a Trading Day or at or later than 5:30 P.M., New York City time, on any Trading Day, (iii) the Trading Day following the date of mailing, if sent by nationally recognized overnight courier service specifying next business day delivery, or (iv) upon actual receipt by the Person to whom such notice is required to be given, if by hand delivery.
 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 corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation 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) **Further Assurances.** 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. Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

- (c) Successors and Assigns. Subject to the restrictions on transfer set forth in this Warrant and compliance with applicable securities laws, this Warrant may be 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.
 - (d) Amendment and Waiver. This Warrant may be amended only in writing signed by the Company and the Holder, or their successors and assigns. Except as otherwise provided herein, the provisions of the Warrants may be amended and 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 has obtained the written consent of 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 NEW YORK 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 CITY OF NEW YORK, BOROUGH OF MANHATTAN, 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. If any part or provision of this Warrant is held unenforceable or in conflict with the applicable laws or regulations of any jurisdiction, the invalid or unenforceable part or provisions shall be replaced with a provision which accomplishes, to the extent possible, the original business purpose of such part or provision in a valid and enforceable manner, and the remainder of this Warrant shall remain binding upon the parties hereto.

[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.

INVIVYD, 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]

Ladies and Gentlemen:

(1) The undersigned is the Holder of Warrant No. __ (the "Warrant") issued by Invivyd, 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) The Holder intends that payment of the Exercise Price shall be made as (check one):

Cash Exercise

"Cashless Exercise" under Section 10 of the Warrant

(4) If the Holder has elected a Cash Exercise, the Holder shall pay the sum of \$ _____ in immediately available funds to the Company in accordance with the terms of the Warrant.

(5) Pursuant to this Exercise Notice, the Company shall deliver to the Holder Warrant Shares determined in accordance with the terms of the Warrant. The Warrant Shares shall be delivered (check one):

to the following DWAC Account Number: _____

in book-entry form via a direct registration system

in restricted book-entry form in the Company's share register

(6) 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 (i) the Holder is an "accredited investor" as defined in Regulation D promulgated under the Securities Act of 1933, as amended and (ii) 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)



Hogan Lovells US LLP
1735 Market Street, Floor 23
Philadelphia, PA 19103
T +1 267 675 4600
F +1 267 675 4601
www.hoganlovells.com

November 19, 2025

Board of Directors
Invivyd, Inc.
209 Church Street
New Haven, CT 06510

Ladies and Gentlemen:

We are acting as counsel to Invivyd, Inc., a Delaware corporation (the "**Company**"), in connection with its registration statement on Form S-3 (File No. 333-267643) (the "**Registration Statement**"), filed with the Securities and Exchange Commission (the "**SEC**") under the Securities Act of 1933, as amended (the "**Act**"), relating to the public offering of up to (i) 51,500,000 shares (the "**Shares**") of common stock, par value \$0.0001 per share, of the Company (the "**Common Stock**") and (ii) pre-funded warrants (the "**Warrants**") to purchase up to an aggregate of 6,000,000 shares of Common Stock with an exercise price equal to \$0.0001 per share (the "**Warrant Shares**" and collectively with the Shares and the Warrants, the "**Securities**"). All of the Securities are to be sold by the Company pursuant to that certain Underwriting Agreement, dated as of November 17, 2025, by and among the Company and the representative of the several underwriters named therein (the "**Underwriting Agreement**"), as described in the prospectus, dated October 5, 2022 (the "**Base Prospectus**"), which forms a part of the Registration Statement, as supplemented by the Prospectus Supplement, dated November 17, 2025 (the "**Prospectus Supplement**") and the Free Writing Prospectus, dated November 17, 2025 (the "**Free Writing Prospectus**"), together with the Base Prospectus and the Prospectus Supplement, the "**Prospectus**"). This opinion letter is furnished to you at your request to enable you to fulfill the requirements of Item 601(b)(5) of Regulation S-K, 17 C.F.R. § 229.601(b)(5), in connection with the Registration Statement.

For purposes of this opinion letter, we have examined copies of such agreements, instruments and documents as we have deemed an appropriate basis on which to render the opinions hereinafter expressed. In our examination of the aforesaid documents, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the accuracy and completeness of all documents submitted to us, the authenticity of all original documents, and the conformity to authentic original documents of all documents submitted to us as copies (including pdfs). As to all matters of fact, we have relied on the representations and statements of fact made in the documents so reviewed, and we have not independently established the facts so relied on. This opinion letter is given, and all statements herein are made, in the context of the foregoing.

This opinion letter is based as to matters of law solely on the Delaware General Corporation Law, as amended. We express no opinion herein as to any other statutes, rules or regulations.

Hogan Lovells US LLP is a limited liability partnership registered in the state of Delaware. "Hogan Lovells" is an international legal practice that includes Hogan Lovells US LLP and Hogan Lovells International LLP, with offices in: Alicante Amsterdam Baltimore Beijing Berlin Birmingham Boston Brussels Colorado Springs Denver Dubai Dublin Dusseldorf Frankfurt Hamburg Hanoi Ho Chi Minh City Hong Kong Houston London Los Angeles Luxembourg Madrid Mexico City Miami Milan Minneapolis Monterrey Munich New York Northern Virginia Paris Philadelphia Riyadh Rome San Francisco São Paulo Shanghai Silicon Valley Singapore Tokyo Washington, D.C. For more information see www.hoganlovells.com.

Based upon, subject to and limited by the foregoing, we are of the opinion that following (i) execution and delivery by the Company of the Underwriting Agreement, (ii) issuance of the Securities pursuant to the terms of the Underwriting Agreement, and (iii) receipt by the Company of the consideration for the Securities specified in the resolutions of the Board of Directors or the Pricing Committee of the Board of Directors:

1. The Shares will be validly issued, fully paid and nonassessable.
2. The Warrants will constitute valid and binding obligations of the Company.
3. The Warrant Shares, when issued, delivered and paid for upon exercise in accordance with the provisions of the Warrants, will be validly issued, fully paid and nonassessable.

This opinion letter has been prepared for use in connection with the Registration Statement and Prospectus relating to the offer and sale of the Securities. We assume no obligation to advise of any changes in the foregoing subsequent to the date hereof.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Company's Current Report on Form 8-K to be filed with the SEC on the date hereof and to the reference to this firm under the caption "Legal Matters" in the Prospectus constituting a part of the Registration Statement. In giving this consent, we do not thereby admit that we are an "expert" within the meaning of the Act.

Very truly yours,

/s/ Hogan Lovells US LLP

HOGAN LOVELLS US LLP



Invivyd Announces Proposed Public Offering of Common Stock

NEW HAVEN, Conn., Nov. 17, 2025 (GLOBE NEWSWIRE) -- Invivyd, Inc. (Invivyd) (Nasdaq: IVVD) today announced that it has commenced an underwritten public offering of shares of its common stock. In addition, Invivyd intends to grant the underwriters an option for a period of 30 days to purchase up to an additional 15% of the shares of Invivyd common stock sold in the public offering at the public offering price, less underwriting discounts and commissions. All of the shares are being offered by Invivyd. The offering is subject to market and other conditions and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering.

Cantor is acting as sole book-running manager for the offering.

Invivyd intends to use the net proceeds that it will receive from the offering, together with its existing cash and cash equivalents, for commercial preparedness for the potential launch of VYD2311, continued research and development related to its pipeline programs such as respiratory syncytial virus (RSV) and measles, continued advancement of the Spike Protein Elimination and Recovery (SPEAR) Study Group efforts related to assessing the effects of monoclonal antibody therapy for Long COVID and COVID-19 Post-Vaccination Syndrome, and for working capital and other general corporate purposes.

The securities described above are being offered by Invivyd pursuant to a shelf registration statement on Form S-3 (File No. 333-267643) filed with the U.S. Securities and Exchange Commission (SEC) on September 28, 2022 and declared effective by the SEC on October 5, 2022.

The offering will be made only by means of a prospectus supplement and accompanying prospectus that form a part of the registration statement. A preliminary prospectus supplement and the accompanying prospectus relating to and describing the terms of the offering will be filed with the SEC and will be available on the SEC's website at www.sec.gov. Copies of the preliminary prospectus supplement and accompanying prospectus relating to the offering, when available, may be obtained from Cantor Fitzgerald & Co., Attention: Equity Capital Markets, 110 East 59th Street, 6th Floor, New York, New York 10022; or by e-mail at prospectus@cantor.com. The final terms of the offering will be disclosed in a final prospectus supplement to be filed with the SEC.

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

About Invivyd

Invivyd, Inc. (Nasdaq: IVVD) is a biopharmaceutical company devoted to delivering protection from serious viral infectious diseases, beginning with SARS-CoV-2. Invivyd deploys a proprietary integrated technology platform unique in the industry designed to assess, monitor, develop, and adapt to create best in class antibodies. In March 2024, Invivyd received emergency use authorization (EUA) from the U.S. FDA for a monoclonal antibody (mAb) in its pipeline of innovative antibody candidates.

Trademarks are the property of their respective owners.

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. Words such as “anticipates,” “believes,” “could,” “expects,” “intends,” “potential,” “projects,” and “future” or similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. Forward-looking statements include, but are not limited to, statements regarding the timing, anticipated terms and success of the proposed offering, as well as the anticipated use of the net proceeds from the proposed offering. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. Uncertainties and risks may cause Invivyd’s actual results to be materially different than those expressed in or implied by Invivyd’s forward-looking statements. For Invivyd, this includes satisfaction of the customary closing conditions of the offering, delays in obtaining required stock exchange or other regulatory approvals, political uncertainties, stock price volatility and uncertainties relating to the financial markets, the medical community and the global economy, and the impact of instability in general business and economic conditions, including changes in inflation, interest rates and the labor market. Other factors that may cause Invivyd’s actual results to differ materially from those expressed or implied in the forward-looking statements in this press release are described under the heading “Risk Factors” in the preliminary prospectus supplement relating to the offering to be filed with the SEC, in Invivyd’s Annual Report on Form 10-K for the year ended December 31, 2024 and Quarterly Report on Form 10-Q for the quarter ended September 30, 2025 filed with the SEC, and in Invivyd’s other filings with the SEC, and in its future reports to be filed with the SEC and available at www.sec.gov. Forward-looking statements contained in this press release are made as of this date, and Invivyd undertakes no duty to update such information whether as a result of new information, future events or otherwise, except as required under applicable law.

Contacts:

Media Relations

(781) 208-0160
media@invivyd.com

Investor Relations

(781) 208-1747
investors@invivyd.com



Invivyd Announces Pricing of \$125 Million Public Offering of Common Stock and Pre-Funded Warrants

NEW HAVEN, Conn., Nov. 17, 2025 (GLOBE NEWSWIRE) – Invivyd, Inc. (Invivyd) (Nasdaq: IVVD) today announced the pricing of an underwritten public offering of 44,000,000 shares of its common stock at an offering price of \$2.50 per share and, to certain investors, in lieu of common stock, pre-funded warrants to purchase 6,000,000 shares of its common stock at a price of \$2.4999 per pre-funded warrant. The gross proceeds from this offering are expected to be approximately \$125.0 million, before deducting underwriting discounts and commissions and offering expenses payable by Invivyd. The purchase price per share of each pre-funded warrant represents the per share offering price for the common stock, minus the \$0.0001 per share exercise price of each such pre-funded warrant. All of the shares and pre-funded warrants are being offered by Invivyd. In addition, Invivyd has granted the underwriters an option for a period of 30 days to purchase up to an additional 7,500,000 shares of Invivyd common stock at the public offering price, less underwriting discounts and commissions. The offering is expected to close on or about November 19, 2025, subject to the satisfaction of customary closing conditions.

Cantor is acting as sole book-running manager for the offering. H.C. Wainwright & Co. is acting as lead manager for the offering.

Invivyd intends to use the net proceeds that it will receive from the offering, together with its existing cash and cash equivalents, for commercial preparedness for the potential launch of VYD2311, continued research and development related to its pipeline programs such as respiratory syncytial virus (RSV) and measles, continued advancement of the Spike Protein Elimination and Recovery (SPEAR) Study Group efforts related to assessing the effects of monoclonal antibody therapy for Long COVID and COVID-19 Post-Vaccination Syndrome, and for working capital and other general corporate purposes.

The securities described above are being offered by Invivyd pursuant to a shelf registration statement on Form S-3 (File No. 333-267643) filed with the U.S. Securities and Exchange Commission (SEC) on September 28, 2022 and declared effective by the SEC on October 5, 2022.

The offering is being made only by means of a prospectus supplement and accompanying prospectus that form a part of the registration statement. A preliminary prospectus supplement and free writing prospectus relating to the offering were filed with the SEC on November 17, 2025 and are available on the SEC's website at www.sec.gov. The final prospectus supplement relating to and describing the terms of the offering will be filed with the SEC and also will be available on the SEC's website at www.sec.gov. Copies of the final prospectus supplement, when available, and accompanying prospectus relating to the offering may also be obtained from Cantor Fitzgerald & Co., Attention: Equity Capital Markets, 110 East 59th Street, 6th Floor, New York, New York 10022; or by e-mail at prospectus@cantor.com.

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

About Invivyd

Invivyd, Inc. (Nasdaq: IVVD) is a biopharmaceutical company devoted to delivering protection from serious viral infectious diseases, beginning with SARS-CoV-2. Invivyd deploys a proprietary integrated technology platform unique in the industry designed to assess, monitor, develop, and adapt to create best in class antibodies. In March 2024, Invivyd received emergency use authorization (EUA) from the U.S. FDA for a monoclonal antibody (mAb) in its pipeline of innovative antibody candidates.

Trademarks are the property of their respective owners.

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. Words such as “anticipates,” “believes,” “could,” “expects,” “intends,” “potential,” “projects,” and “future” or similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. Forward-looking statements include, but are not limited to, statements regarding the amount of proceeds from the offering, the timing of the closing of the offering, as well as the anticipated use of the net proceeds from the offering. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. Uncertainties and risks may cause Invivyd’s actual results to be materially different than those expressed in or implied by Invivyd’s forward-looking statements. For Invivyd, this includes satisfaction of the customary closing conditions of the offering, delays in obtaining required stock exchange or other regulatory approvals, political uncertainties, stock price volatility and uncertainties relating to the financial markets, the medical community and the global economy, and the impact of instability in general business and economic conditions, including changes in inflation, interest rates and the labor market. Other factors that may cause Invivyd’s actual results to differ materially from those expressed or implied in the forward-looking statements in this press release are described under the heading “Risk Factors” in the preliminary prospectus supplement and the free writing prospectus relating to the offering filed with the SEC, in Invivyd’s Annual Report on Form 10-K for the year ended December 31, 2024 and Quarterly Report on Form 10-Q for the quarter ended September 30, 2025 filed with the SEC, and in Invivyd’s other filings with the SEC, and in its future reports to be filed with the SEC and available at www.sec.gov. Forward-looking statements contained in this press release are made as of this date, and Invivyd undertakes no duty to update such information whether as a result of new information, future events or otherwise, except as required under applicable law.

Contacts:

Media Relations

(781) 208-0160
media@invivyd.com

Investor Relations

(781) 208-1747
investors@invivyd.com
