



6,765,463 Shares of Common Stock
Warrants to Purchase up to 7,692,307 Shares of Common Stock
Pre-Funded Warrants to Purchase up to 926,844 Shares of Common Stock

This prospectus supplement updates and should be read in conjunction with the prospectus dated January 8, 2021, or the Prospectus, relating to the offering of up to 6,765,463 shares of our common stock, warrants to purchase up to 7,692,307 shares of our common stock and pre-funded warrants to purchase 926,844 shares of our common stock, as well as an option to the underwriter in the offering to purchase up to an additional 1,153,846 shares of common stock and/or warrants to purchase up to 1,153,846 shares of our common stock, in any combination thereof. To the extent that there is any conflict between the information contained herein and the information contained in the Prospectus, the information contained herein supersedes and replaces such information.

Current Report

This prospectus supplement incorporates into the Prospectus the information contained in our attached Current Report on Form 8-K that we filed with the Securities and Exchange Commission on July 2, 2021, or the Form 8-K. The Form 8-K, as filed, is set forth below.

The information contained in this Prospectus Supplement No. 11 supplements and supersedes, in relevant part, the information contained in the Prospectus, as amended and supplemented to date. This Prospectus Supplement No. 11 is incorporated by reference into, and should be read in conjunction with, the Prospectus, as amended and supplemented to date, and is not complete without, and may not be delivered or utilized except in connection with, the Prospectus, as amended and supplemented to date.

The Prospectus, together with Prospectus Supplement No.1, Prospectus Supplement No. 2, Prospectus Supplement No. 3, Prospectus Supplement No. 4, Prospectus Supplement No. 5, Prospectus Supplement No. 6, Prospectus Supplement No. 7, Prospectus Supplement No. 8, Prospectus Supplement No. 9, Prospectus Supplement No. 10 and Prospectus Supplement No. 11, constitutes the prospectus required to be delivered by Section 5(b) of the Securities Act of 1933, as amended, with respect to offers and sales of the securities as set forth in the Prospectus, as amended and supplemented. All references in the Prospectus to “this prospectus” are amended to read “this prospectus (as supplemented and amended to date).”

Our common stock is traded on the NASDAQ Capital Market under the symbol “KMPH.” The last reported sale price of our common stock on July 9, 2021 was \$13.31 per share. You are urged to obtain current market quotations for our common stock.

Investing in our securities is highly speculative and involves a significant degree of risk. See “Risk Factors” beginning on page 9 of the Prospectus and the Risk Factors identified in our Annual Report for the year ended December 31, 2020 and in our Quarterly Report for the quarter ended March 31, 2021 for a discussion of information that should be considered before making a decision to purchase our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is July 12, 2021.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, DC 20549

FORM 8-K

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

Date of Report (Date of earliest event reported): July 2, 2021

KemPharm, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-36913
(Commission
File Number)

20-5894398
(IRS Employer
Identification No.)

1180 Celebration Boulevard, Suite 103
Celebration, FL 34747
(Address of principal executive offices, including zip code)

(321) 939-3416
(Registrant's telephone number, including area code)

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

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

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

Title of Each Class:	Trading Symbol(s)	Name of Each Exchange on which Registered
Common Stock, \$0.0001 par value	KMPH	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 July 2, 2021, KemPharm, Inc., or the Company, entered into an Equity Distribution Agreement, or the Agreement, with JMP Securities LLC, or JMP, and RBC Capital Markets, LLC, or RBCCM, under which the Company may offer and sell, from time to time at its sole discretion, shares of its common stock, par value \$0.0001 per share, or the Common Stock, having an aggregate offering price of up to \$75,000,000 through JMP and RBCCM as its sales agents. The issuance and sale, if any, of Common Stock by the Company under the Agreement will be made pursuant to a registration statement on Form S-3.

JMP and RBCCM may sell the Common Stock by any method permitted by law deemed to be an “at the market offering” as defined in Rule 415 of the Securities Act of 1933, as amended. JMP and RBCCM will use commercially reasonable efforts to sell the Common Stock from time to time, based upon instructions from the Company (including any price, time or size limits or other customary parameters or conditions the Company may impose). The Company will pay JMP and RBCCM a commission equal to three percent (3.0%) in the aggregate of the gross sales proceeds of any Common Stock sold through JMP and RBCCM under the Agreement. The Company has provided customary representations, warranties and covenants and the parties have agreed to customary indemnification rights.

The Company is not obligated to make any sales of Common Stock under the Agreement. The offering of shares of Common Stock pursuant to the Agreement will terminate upon the earlier of (i) the sale of all Common Stock subject to the Agreement or (ii) termination of the Agreement in accordance with its terms.

The foregoing description of the Agreement is not complete and is qualified in its entirety by reference to the full text of the Agreement, a copy of which is filed herewith as Exhibit 10.1 to this Current Report on Form 8-K and is incorporated herein by reference.

This Current Report on Form 8-K shall not constitute an offer to sell or the solicitation of an offer to buy the securities discussed herein, nor shall there be any offer, solicitation, or sale of the securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit Number</u>	<u>Exhibit Description</u>
10.1	Equity Distribution Agreement, dated July 2, 2021, by and among KemPharm, Inc., JMP Securities LLC and RBC Capital Markets, LLC

SIGNATURES

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

KEMPHARM, INC.

By: /s/ R. LaDuane Clifton

R. LaDuane Clifton, CPA

Chief Financial Officer, Secretary and Treasurer

Date: July 2, 2021

KemPharm, Inc.

\$75,000,000

Common Stock

EQUITY DISTRIBUTION AGREEMENT

Dated: July 2, 2021

TABLE OF CONTENTS

	Page
SECTION 1. Description of Securities.	1
SECTION 2. Placements.	2
SECTION 3. Sale of Placement Securities by the Designated Agent.	3
SECTION 4. Suspension of Sales	4
SECTION 5. Representations and Warranties.	4
SECTION 6. Sale and Delivery to the Designated Agent; Settlement.	20
SECTION 7. Covenants of the Company	21
SECTION 8. Payment of Expenses	26
SECTION 9. Conditions of the Placement Agents' Obligations	26
SECTION 10. Indemnity and Contribution by the Company and the Placement Agents.	28
SECTION 11. Representations, Warranties and Agreements to Survive Delivery	31
SECTION 12. Termination of Agreement.	31
SECTION 13. Notices	32
SECTION 14. Parties	32
SECTION 15. Adjustments for Stock Splits	32
SECTION 16. Governing Law; Time; Waiver of Jury Trial	32
SECTION 17. Effect of Headings	32
SECTION 18. Permitted Free Writing Prospectuses	32
SECTION 19. Absence of Fiduciary Relationship	33

EXHIBITS

- Exhibit A – Form of Placement Notice
- Exhibit B – Authorized Individuals for Placement Notices and Acceptances
- Exhibit C – Compensation
- Exhibit D – Officer Certificate
- Exhibit E – Issuer Free Writing Prospectus

KEMPHARM, INC.

\$75,000,000

Common Stock

EQUITY DISTRIBUTION AGREEMENT

July 2, 2021

JMP Securities LLC
600 Montgomery Street, Suite 1100
San Francisco, California 94111

RBC Capital Markets, LLC
200 Vesey Street, 8th Floor
New York, New York 10281

Ladies and Gentlemen:

KemPharm, Inc., a Delaware corporation (the “Company”), confirms its agreement (this “Agreement”) with each of JMP Securities LLC (“JMP”) and RBC Capital Markets, LLC (“RBCCM”, and each of JMP and RBCCM are individually referred to as a “Placement Agent” and collectively, as the “Placement Agents”), as follows:

SECTION 1. Description of Securities.

The Company agrees that, from time to time during the term of this Agreement, on the terms and subject to the conditions set forth herein, it may issue and sell through the Placement Agents, acting as agent and/or principal, shares (the “Securities”) of the Company’s common stock, par value \$0.0001 per share (the “Common Stock”), having an aggregate offering amount of up to \$75,000,000. Notwithstanding anything to the contrary contained herein, except as set forth in a Placement Notice (as defined below), the parties hereto agree that compliance with the limitations set forth in this Section 1 on the number of Securities issued and sold under this Agreement shall be the sole responsibility of the Company, and the Placement Agents shall have no obligation in connection with such compliance. The issuance and sale of the Securities through the Placement Agents will be effected pursuant to the Registration Statement (as defined below) filed by the Company and declared effective by the Securities and Exchange Commission (the “Commission”), although nothing in this Agreement shall be construed as requiring the Company to offer, sell or issue Common Stock or any other securities under this Agreement, through the Placement Agents or pursuant to the Registration Statement.

The Company shall file, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the “Securities Act”), with the Commission a registration statement on Form S-3, including a base prospectus relating to certain securities, including the Securities, to be issued from time to time by the Company, and which incorporates by reference documents that the Company has filed or will file in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the “Exchange Act”). The Company has prepared an equity distribution prospectus specifically relating to the Securities (the “Equity Distribution Prospectus”) that will be included as part of such registration statement. The Company will, if necessary, prepare a prospectus supplement specifically relating to the Securities (the “Prospectus Supplement”) to the base prospectus included as part of such registration statement. The Company will furnish to the Placement Agents, for use by the Placement Agents, copies of the Equity

Distribution Prospectus included as part of such registration statement and any Prospectus Supplement. Except where the context otherwise requires, such registration statement, as amended when it becomes effective, and any post-effective amendment thereto, including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus (as defined below) subsequently filed with the Commission pursuant to Rule 424(b) under the Securities Act or deemed to be a part of such registration statement pursuant to Rule 430B or 462(b) of the Securities Act, is herein called the "Registration Statement." The base prospectus, including all documents incorporated therein by reference, and the Equity Distribution Prospectus, including all documents incorporated therein by reference, each of which is included in the Registration Statement, as it or they may be supplemented by any Prospectus Supplement, in the form in which such base prospectus, Equity Distribution Prospectus and/or Prospectus Supplement have most recently been filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act, together with any "issuer free writing prospectus," as defined in Rule 433 of the Securities Act, relating to the Securities that (i) is required to be filed with the Commission by the Company or (ii) is exempt from filing pursuant to Rule 433(d)(5)(i), in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g) is herein called the "Prospectus." Any reference herein to the Registration Statement, the Prospectus or any amendment or supplement thereto shall be deemed to refer to and include the documents incorporated by reference therein, and any reference herein to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement or the Prospectus shall be deemed to refer to and include the filing after the execution hereof of any document with the Commission deemed to be incorporated by reference therein. Any reference herein to financial statements and schedules and other information that is "contained," "included" or "stated" in the Registration Statement, the Prospectus or to any amendment or supplement thereto (and all other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information that is incorporated by reference in the Registration Statement or the Prospectus, as the case may be. Any reference herein to the Registration Statement, any Rule 462(b) Registration Statement (as defined below), the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to the Commission's Electronic Data Gathering, Analysis and Retrieval system ("EDGAR"); all references in this Agreement to any Issuer Free Writing Prospectus (as defined below) (other than any Issuer Free Writing Prospectuses that, pursuant to Rule 433 under the Securities Act, are not required to be filed with the Commission) shall be deemed to include the copy thereof filed with the Commission pursuant to EDGAR.

SECTION 2. Placements.

Each time that the Company wishes to issue and sell the Securities hereunder (each, a "Placement"), it will notify a Placement Agent (the "Designated Agent") by email notice (or other method mutually agreed to in writing by the parties) containing the parameters in accordance with which it desires the Securities to be sold, which shall at a minimum include the number of Securities to be sold (the "Placement Securities"), the time period during which sales are requested to be made, any limitation on the number of Securities that may be sold in any one Trading Day (as defined in Section 3) and any minimum price below which sales may not be made (a "Placement Notice"), a form of which containing such minimum sales parameters necessary is attached hereto as Exhibit A. The Placement Notice shall originate from any of the individuals from the Company set forth on Exhibit B (with a copy to each of the other individuals from the Company listed on such exhibit), and shall be addressed to each of the individuals from the Designated Agent set forth on Exhibit B, as such Exhibit B may be amended from time to time. If the Designated Agent wishes to accept such proposed terms included in the Placement Notice (which it may decline to do so for any reason in its sole discretion) or, following discussion with the Company, wishes to accept amended terms, the Designated Agent will, prior to 4:30 p.m. (Eastern Time) on the Business Day (as defined below) following the Business Day on which such Placement Notice is delivered to the Designated Agent, issue to the Company a notice by email (or other method mutually agreed to in writing by the parties) addressed to

all of the individuals from the Company and the Designated Agent set forth on Exhibit B) setting forth the terms that the Designated Agent is willing to accept. Where the terms provided in the Placement Notice are amended as provided for in the immediately preceding sentence, such terms will not be binding on the Company or the Designated Agent until the Company delivers to the Designated Agent an acceptance by email (or other method mutually agreed to in writing by the parties) of all of the terms of such Placement Notice, as amended (the “Acceptance”), which email shall be addressed to all of the individuals from the Company and the Designated Agent set forth on Exhibit B. The Placement Notice (as amended by the corresponding Acceptance, if applicable) shall be effective upon receipt by the Company of the Designated Agent’s acceptance of the terms of the Placement Notice or upon receipt by the Designated Agent of the Acceptance, as the case may be, and shall continue in effect unless and until (i) the entire amount of the Placement Securities have been sold, (ii) in accordance with the Placement Notice requirements set forth in the second sentence of this paragraph, the Company terminates the Placement Notice, (iii) the Company issues a subsequent Placement Notice with parameters superseding those on the earlier dated Placement Notice, (iv) this Agreement has been terminated under the provisions of Section 9 or Section 12 or (v) either party shall have suspended the sale of the Placement Securities in accordance with Section 4 below. The amount of any discount, commission or other compensation to be paid by the Company to the Designated Agent in connection with the sale of the Placement Securities shall be calculated in accordance with the terms set forth in Exhibit C. It is expressly acknowledged and agreed that neither the Company nor the Designated Agent will have any obligation whatsoever with respect to a Placement or any Placement Securities unless and until the Company delivers a Placement Notice to the Designated Agent and either (i) the Designated Agent accepts the terms of such Placement Notice or (ii) where the terms of such Placement Notice are amended, the Company accepts such amended terms by means of an Acceptance pursuant to the terms set forth above, and then only upon the terms specified in the Placement Notice (as amended by the corresponding Acceptance, if applicable) and herein. In the event of a conflict between the terms of this Agreement and the terms of a Placement Notice (as amended by the corresponding Acceptance, if applicable), the terms of the Placement Notice (as amended by the corresponding Acceptance, if applicable) will control. The term “Business Day” means each Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in New York are generally authorized or obligated by law or executive order to close.

SECTION 3. Sale of Placement Securities by the Designated Agent.

Subject to the provisions of Section 6(a), the Designated Agent, for the period specified in the Placement Notice, will use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable laws and regulations to sell the Placement Securities up to the amount specified in the applicable Placement Notice, and otherwise in accordance with the terms of such Placement Notice (as amended by the corresponding Acceptance, if applicable). The Designated Agent will provide written confirmation to the Company no later than the opening of each Trading Day (as defined below) immediately following any Trading Day on which it has made sales of Placement Securities hereunder setting forth the number of Placement Securities sold on such day, the compensation payable by the Company to the Designated Agent pursuant to Section 2 with respect to such sales, and the Net Proceeds (as defined below) payable to the Company, with an itemization of the deductions made by the Designated Agent (as set forth in Section 6(b)) from the gross proceeds that it receives from such sales. Subject to the terms of the Placement Notice (as amended by the corresponding Acceptance, if applicable), the Designated Agent may sell Placement Securities by any method permitted by law deemed to be an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act. If expressly authorized in a Placement Notice (as amended by the corresponding Acceptance, if applicable), the Designated Agent may also sell Placement Securities in negotiated transactions. For the purposes hereof, “Trading Day” means any day on which shares of Common Stock are purchased and sold on the principal market on which the Common Stock is then listed or quoted and during which there has been no market disruption of, unscheduled closing of or suspension of trading on such principal market. With respect to the offering and sale of Placement Securities

pursuant to this Agreement, the Company agrees that any offer to sell Placement Securities, any solicitation of an offer to buy Placement Securities, and any sales of Placement Securities shall only be effected by or through one single Placement Agent as the Designated Agent on any single given Trading Day, and in no event shall the Company request that more than one Placement Agent offer or sell Placement Securities pursuant to this Agreement on the same Trading Day.

SECTION 4. Suspension of Sales. The Company or the Placement Agents may, upon notice to the other party in writing (including by email correspondence to each of the individuals of the other party set forth on Exhibit B, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) or by telephone (confirmed immediately by verifiable facsimile transmission or email correspondence to each of the individuals of the other party set forth on Exhibit B), suspend any sale of Placement Securities (a "Suspension"); *provided, however*, that such Suspension shall not affect or impair either party's obligations with respect to any Placement Securities sold hereunder prior to the receipt of such notice. Each of the parties agrees that no such notice under this Section 4 shall be effective against the other unless it is made to one of the individuals named on Exhibit B hereto, as such Exhibit B may be amended from time to time. While a Suspension is in effect any obligations under Sections 7(o), 7(p), 7(q) and 7(r) with respect to the delivery of certificates, opinions, or comfort letters to the Placement Agents, shall be waived.

SECTION 5. Representations and Warranties.

(a) *Representations and Warranties of the Company*. The Company represents and warrants to the Placement Agents as of the date hereof and as of each Representation Date (as defined below) on which a certificate is required to be delivered pursuant to Section 7(o) of this Agreement and as of the time of each sale of any Securities pursuant to this Agreement (the "Applicable Time"), and agrees with the Placement Agents, as follows:

(1) The Securities have been duly registered under the Securities Act pursuant to the Registration Statement. Other than as of the date of this Agreement, the Registration Statement has been declared effective by the Commission under the Securities Act, or, with respect to any registration statement to be filed to register the offer and sale of the Securities pursuant to Rule 462(b) under the Securities Act, including the documents incorporated by reference therein, (a "Rule 462(b) Registration Statement"), will be filed with the Commission and become effective under the Securities Act no later than 10:00 P.M., New York City time, on the date required to increase the dollar amount of Securities available to be offered and sold under the Registration Statement. The Company has complied to the Commission's satisfaction with all requests of the Commission for additional or supplemental information related to the Registration Statement and the Prospectus. No stop order suspending the effectiveness of the Registration Statement or any Rule 462(b) Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the Company's knowledge after reasonable investigation and due diligence inquiry ("Knowledge"), are contemplated or threatened by the Commission, and any request on the part of the Commission for additional information has been complied with. The Company meets the requirements for use of Form S-3 under the Securities Act. The Commission has not issued any order preventing or suspending the use of the Prospectus or any free writing prospectus, and no proceeding for that purpose has been initiated or, to the Company's Knowledge, threatened by the Commission.

As of the date of this Agreement, the proposed sale of the Placement Securities hereunder meets the requirements of General Instruction I.B.1 of Form S-3.

The Prospectus when filed will comply or complied and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act. Each of the Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendments or supplements thereto, at the time it becomes effective and each effective date with respect thereto or its date, as applicable, will comply and as of each of the Settlement Dates, if any, will comply in all material respects with the Securities Act and did not and, as of each Settlement Date, if any, 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. The Prospectus, as amended or supplemented, as of its date, did not and, as of each of the Settlement Dates, if any, 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 two 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 any amendments or supplements thereto, made in reliance upon and in conformity with information furnished to the Company in writing by the Placement Agents expressly for use therein. There are no contracts or other documents required to be described in the Prospectus or to be filed as exhibits to the Registration Statement which have not been described or filed as required.

The copies of the Registration Statement and any Rule 462(b) Registration Statement and any amendments thereto, any other preliminary prospectus, each Issuer Free Writing Prospectus (as defined below) that is required to be filed with the Commission pursuant to Rule 433 under the Securities Act and the Prospectus and any amendments or supplements thereto delivered and to be delivered to the Placement Agents (electronically or otherwise) in connection with the offering of the Securities were and will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T. “Issuer Free Writing Prospectus” means any “issuer free writing prospectus,” as defined in Rule 433 under the Securities Act, relating to the Securities that (i) is required to be filed with the Commission by the Company, (ii) is a “road show” that is a “written communication” within the meaning of Rule 433(d)(8)(i) under the Securities Act whether or not required to be filed with the Commission, or (iii) is exempt from filing pursuant to Rule 433(d)(5)(i) under the Securities Act because it contains a description of the Securities or of the offering that does not reflect the final terms, and all free writing prospectuses that are listed in Exhibit E hereto, as such Exhibit E may be modified from time to time, in each case in the form furnished (electronically or otherwise) to the Placement Agents for use in connection with the offering of the Securities.

Each Issuer Free Writing Prospectus relating to the Securities, as of its issue date and as of each Applicable Time and Settlement Date (as defined below), did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement or the Prospectus, including any incorporated document deemed to be a part thereof that has not been superseded or modified; each Issuer Free Writing Prospectus, as supplemented by and taken together with the Prospectus, as of the Applicable Time and Settlement Date (as defined below), 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 light of the circumstances under which they were made, not misleading. The foregoing sentence does not apply to statements in or omissions from any issuer free writing prospectus made in reliance upon and in conformity with written information furnished to the Company by the Placement Agents specifically for use therein.

The Company has delivered to the Placement Agents one complete copy of the Registration Statement and a copy of each consent and certificate of experts filed as a part thereof, and conformed copies of the Registration Statement (without exhibits) and the Prospectus, as amended or supplemented, in such quantities and at such places as the Placement Agents have reasonably requested.

(2) The Company is not an “ineligible issuer,” as defined in Rule 405 under the Securities Act. The Company agrees to notify the Placement Agents promptly upon the Company becoming an “ineligible issuer.”

(3) The Company has not distributed and will not distribute, prior to the completion of the Placement Agents’ distribution of the Placement Securities, any offering material in connection with the offering and sale of the Placement Securities other than the Prospectus and any Issuer Free Writing Prospectus or the Registration Statement.

(4) The Company has the corporate power and authority to enter into and perform its obligations under this Agreement. This Agreement has been duly authorized, executed and delivered by, and is a valid and binding agreement of, the Company, enforceable in accordance with its terms, except as rights to indemnification hereunder may be limited by applicable law and except as the enforcement hereof 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.

(5) The Placement Securities, when issued and delivered, will be duly authorized for issuance and sale pursuant to this Agreement and, when issued and delivered by the Company against payment therefor pursuant to this Agreement, will be duly authorized, validly issued, fully paid and nonassessable, and will conform in all material respects to the description of the Common Stock in the Registration Statement and the Prospectus.

(6) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware. The Company is duly qualified to do business and is in good standing as a foreign corporation or in each jurisdiction in which its respective ownership or lease of property or the conduct of its business requires such qualification and has all power and authority (corporate or other) necessary to own or hold its properties and to conduct the business in which it is engaged, except where the failure to so qualify or have such power or authority would not (i) have, singularly or in the aggregate, a material adverse effect on, the condition (financial or otherwise), results of operations, assets, liabilities, earnings, business or prospects of the Company, or (ii) impair in any material respect the ability of the Company to perform its obligations under this Agreement or to consummate any transactions contemplated by this Agreement or the Prospectus (any such effect as described in clauses (i) or (ii), a “Material Adverse Effect”). The Company has no subsidiaries.

(7) All of the issued shares of capital stock of the Company, have been duly and validly authorized and issued, are fully paid and non-assessable, have been issued in compliance with federal and state securities laws and conform in all material respects to the description thereof contained in the Prospectus under the heading “Description of Capital Stock.” All of the Company’s options, warrants and other rights to purchase or exchange any securities for shares of the Company’s capital stock have been duly authorized and validly issued and were issued in compliance with federal and state securities laws. None of the outstanding shares of Common Stock was issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. As of July 2, 2021, there were no authorized or outstanding shares of capital stock, options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Company other than those described in the Prospectus. The description

of the Company's stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, as described or incorporated by reference in the Prospectus, accurately and fairly present in all material respects the information required to be shown with respect to such plans, arrangements, options and rights.

(8) The execution, delivery and performance of this Agreement by the Company, the issue and sale of the Placement Securities by the Company and the consummation of the transactions contemplated hereby will not (with or without notice or lapse of time or both) (i) conflict with or result in a breach or violation of any of the terms or provisions of, constitute a default or a Debt Repayment Triggering Event (as defined below) under, give rise to any right of termination or other right or the cancellation or acceleration of any right or obligation or loss of a benefit under, or give rise to the creation or imposition of any lien, encumbrance, security interest, claim or charge upon any property or assets of the Company pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company is subject, (ii) result in any violation of the provisions of the certificate of incorporation or by-laws of the Company or (iii) result in any violation of any law, statute, rule, regulation, judgment, order or decree of any court or governmental agency or body, domestic or foreign, having jurisdiction over the Company or any of its properties or assets; except in the cases of clauses (i) and (iii), to the extent that any such conflict, breach, violation or default would not, individually or in the aggregate, have a Material Adverse Effect. A "Debt Repayment Triggering Event" means any event or condition that gives, or with the giving of notice or lapse of time would give, the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company.

(9) Subject to any applicable restrictions imposed by General Instruction I.B.6 of Form S-3 (and the making of any additional filings with the Commission required as a result thereof) and except for such consents, approvals, authorizations, orders, registrations, qualifications or filings that may be required (i) by or with the Nasdaq Capital Market in connection with the listing of the Placement Securities on the Nasdaq Capital Market or the Financial Industry Regulatory Authority ("FINRA") or (ii) pursuant to the Securities Act, the Exchange Act or any applicable state or foreign securities laws, no consent, approval, authorization or order of, or filing, license, qualification or registration (each an "Authorization") with, any court, governmental or non-governmental agency or body, foreign or domestic, which has not been made, obtained or taken and is not in full force and effect, is required for the execution, delivery and performance of the Agreement by the Company, the offer, issuance and sale of the Placement Securities by the Company or the consummation of the transactions contemplated hereby; and no event has occurred that allows or results in, or after notice or lapse of time or both would allow or result in, revocation, suspension, termination or invalidation of any such Authorization or any other impairment of the rights of the holder or maker of any such Authorization. All corporate approvals (including those of stockholders, if any) necessary for the Company to consummate the transactions contemplated by this Agreement have been obtained and are in effect.

(10) RSM US LLP, who have certified certain financial statements included or incorporated by reference in the Prospectus, is an independent registered public accounting firm with respect to the Company within the meaning of Article 2-01 of Regulation S-X and the Public Company Accounting Oversight Board (United States) (the "PCAOB").

(11) The financial statements, together with the related notes, included or incorporated by reference in the Prospectus fairly present in all material respects the financial

position and the results of operations and changes in financial position of the Company at the respective dates or for the respective periods therein specified. Such statements and related notes have been prepared in accordance with the generally accepted accounting principles in the United States (“GAAP”) applied on a consistent basis throughout the periods involved except as may be set forth in the related notes included or incorporated by reference in the Prospectus; and provided that the unaudited interim financial statements, which are subject to normal year-end adjustments, may not contain certain footnotes, as permitted by the applicable rules of the Commission. The financial statements, together with the related notes, included or incorporated by reference in the Prospectus comply in all material respects with Regulation S-X. No other financial statements or supporting schedules or exhibits are required by Regulation S-X to be described, included or incorporated by reference in the Prospectus. The summary and selected financial data, if any, included or incorporated by reference in the Prospectus fairly present in all material respects the information shown therein as at the respective dates and for the respective periods specified and are derived from the financial statements set forth in or incorporated by reference in the Prospectus and other financial information. All information contained or incorporated by reference in the Prospectus regarding “non-GAAP financial measures” (as defined in Regulation G) complies in all material respects with Regulation G and Item 10 of Regulation S-K, to the extent applicable.

(12) Other than as set forth or contemplated in the Prospectus: (i) the Company has not (1) sustained, since the date of the latest audited financial statements included or incorporated by reference in the Prospectus, any material loss or material interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, (2) incurred any material liability or obligation, direct or contingent, other than liabilities and obligations which were incurred in the ordinary course of business, (3) entered into any material transaction other than in the ordinary course of business or (4) declared or paid any dividends on its capital stock; and (ii) since the date of the latest audited financial statements included or incorporated by reference in the Prospectus, there has not been any material change in the capital stock (other than (1) Common Stock issued pursuant to the exercise of warrants or conversion of convertible securities or upon the exercise or vesting of stock options or other awards outstanding under the Company’s equity compensation or other plans, (2) options, Common Stock or other securities granted or issued pursuant to the Company’s equity compensation or other plans, (3) Common Stock issued upon conversion or reclassification of the Company’s convertible preferred stock, (4) the issuance of the Placement Securities and (5) stock repurchases required to be made by the Company pursuant to the terms of existing agreements) or long-term debt of the Company, or any material adverse changes, or any development involving a prospective material adverse change, in or affecting the business, assets, general affairs, management, financial position, prospects, stockholders’ equity or results of operations of the Company.

(13) There is no legal or governmental proceeding to which the Company is a party or of which any property or assets of the Company is the subject, including any proceeding before the United States Food and Drug Administration of the U.S. Department of Health and Human Services (“FDA”) or comparable federal, state, local or foreign governmental bodies (it being understood that the interaction between the Company and the FDA and such comparable governmental bodies relating to the clinical development and product approval process shall not be deemed proceedings for purposes of this representation), which is required to be described in the Prospectus and is not described therein, or which, singularly or in the aggregate, if determined adversely to the Company, would have a Material Adverse Effect; and to the Company’s Knowledge, no such proceedings are threatened by governmental authorities or by others. The Company is in compliance with all applicable federal, state, local and foreign laws, regulations, orders and decrees governing its business as prescribed by the FDA, or any other federal, state or

foreign agencies or bodies engaged in the regulation of pharmaceuticals or biohazardous substances or materials, except where noncompliance would not, singularly or in the aggregate, have a Material Adverse Effect. All preclinical studies and clinical trials conducted by or on behalf of the Company to support approval for commercialization of the Company's products have been conducted by the Company, or to the Company's Knowledge by third parties, in compliance with all applicable federal, state or foreign laws, rules, orders and regulations, except for such failure or failures to be in compliance as would not, singularly or in the aggregate, have a Material Adverse Effect.

(14) The Company (i) is not in violation of its charter or by-laws, (ii) is not in default in any respect, and no event has occurred which, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which it is a party or by which it is bound or to which any of its property or assets is subject (including, without limitation, those administered by the FDA or by any foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA) and (iii) is not in violation in any respect of any law, ordinance, governmental rule, regulation or court order, decree or judgment to which it or its property or assets may be subject except, in the case of clauses (ii) and (iii) of this paragraph (r), for any violations or defaults which, singularly or in the aggregate, would not have a Material Adverse Effect.

(15) Except as described in the Registration Statement and the Prospectus, and except as would not, individually or in the aggregate, have a Material Adverse Effect: (i) the Company has not received any written notice of adverse filing, warning letter, untitled letter or other similar correspondence or written notice from the U.S. Food and Drug Administration, or any other court or arbitrator or federal, state, local or foreign governmental or regulatory authority or other governmental entity performing functions similar to those performed by the FDA, alleging or asserting noncompliance with the Federal Food, Drug and Cosmetic Act (21 U.S.C. § 301 et seq.) (the "FFDCA"), or similar law; (ii) the Company is and has been in compliance with applicable health care laws, including without limitation, the FFDCA, the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)), the civil False Claims Act (31 U.S.C. § 3729 et seq.), the criminal False Claims Law (42 U.S.C. § 1320a-7b(a)), the Civil Monetary Penalties Law (42 U.S.C. § 1320a-7a), the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. § 1320d et seq.), as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (42 U.S.C. § 17921 et seq.) the exclusion laws (42 U.S.C. § 1320a-7), Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act), and the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Affordability Reconciliation Act of 2010, including, without limitation, the Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), and the regulations promulgated pursuant to such laws, and comparable state laws, and all other local, state, federal, national, supranational and foreign health care laws relating to the regulation of the Company (collectively, "Health Care Laws"). The Company possesses all licenses, certificates, authorizations and permits issued by, and has made all declarations and filings with, the appropriate local, state, federal or foreign regulatory agencies or bodies (including, without limitation, those administered by the FDA or by any foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA) which are necessary for the conduct of its business as described in the Prospectus (collectively, the "Governmental Permits") except where any failures to possess or make the same, singularly or in the aggregate, would not have a Material Adverse Effect. The Company is in compliance with all such Governmental Permits, except where the failure to be in compliance would not, singularly or in the aggregate, have a Material Adverse Effect; all such Governmental Permits are valid and in full force and effect, except where the invalidity or failure to be in full force and effect would not, singularly or in the aggregate, have a Material Adverse Effect. All such

Governmental Permits are free and clear of any material restriction or material condition. The Company has not received written notification of any material revocation, modification, suspension, termination or invalidation (or proceedings related thereto) of any such Governmental Permit, and to the Company's Knowledge, no event has occurred that allows or results in, or after notice or lapse of time or both would allow or result in, revocation, modification, suspension, termination or invalidation (or proceedings related thereto) of any such Governmental Permit and the Company has no Knowledge that any such Governmental Permit will not be renewed. The studies, tests and preclinical studies or clinical trials conducted by or on behalf of the Company that are described in the Prospectus (the "Company Studies and Trials") were and, if still pending, are being, conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to, where applicable, accepted professional scientific standards; the descriptions of the results of the Company Studies and Trials contained in the Prospectus are accurate in all material respects; and the Company has not received any notices or correspondence with the FDA or any foreign, state or local governmental body exercising comparable authority requiring the termination, suspension or material modification of any Company Studies or Trials that termination, suspension or material modification would reasonably be expected to have a Material Adverse Effect.

(16) The Company is not and, after giving effect to the offering of the Placement Securities and the application of the proceeds thereof as described in the Prospectus, will not become an "investment company" or an entity "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder.

(17) Neither the Company nor any of its officers, directors or, to the Company's Knowledge, affiliates has taken or will take, directly or indirectly, any action designed or intended to, stabilize or manipulate the price of any security of the Company in connection with the offering of the Placement Securities, or which caused or resulted in, or which might in the future reasonably be expected to cause or result in, stabilization or manipulation of the price of any security of the Company in connection with the offering of the Placement Securities.

(18) The Company owns or possesses the valid right to use all (i) valid and enforceable patents, patent applications, trademarks, trademark registrations, service marks, service mark registrations, Internet domain name registrations, copyrights, copyright registrations, licenses, trade secret rights ("Intellectual Property Rights") and (ii) inventions, software, works of authorships, trademarks, service marks, trade names, databases, formulae, know how, show how, Internet domain names and other intellectual property (including trade secrets and other unpatented and/or unpatentable proprietary confidential information, systems, or procedures) (collectively, "Intellectual Property Assets"), in each case, necessary to conduct its business as currently conducted, and as currently proposed to be conducted and described in the Prospectus; provided that the foregoing representation is made only to the Company's Knowledge as it concerns third-party rights and trademarks. The Company has not received any opinion from its legal counsel concluding that any activities of its business as currently conducted infringes, misappropriates, or otherwise violates, valid and enforceable Intellectual Property Rights of any other person, and has not received written notice of any challenge, which is to the Company's Knowledge still pending, by any other person to the rights of the Company with respect to any Intellectual Property Rights or Intellectual Property Assets owned or used by the Company. To the Company's Knowledge, the Company's business as currently conducted does not infringe, misappropriate or otherwise violate any valid and enforceable Intellectual Property Rights of any other person. All licenses for the use of the Intellectual Property Rights described in the Prospectus are valid, binding upon, and enforceable by or against the Company and, to the Company's Knowledge, the parties thereto in

accordance to its terms, except (i) as limited by laws of general application relating to bankruptcy, insolvency and other relief of debtors, and (ii) as limited by rules of law governing specific performance, injunctive relief or other equitable remedies and by general principals of equity. The Company has complied in all material respects with, and is not in breach in any material respect nor has received any asserted or threatened claim of breach of any intellectual property license, and the Company has no Knowledge of any breach or anticipated breach by any other person to any intellectual property license to which the Company is a party. Except as disclosed in the Registration Statement and the Prospectus and except as would not, individually or in the aggregate, have a Material Adverse Effect, there is no pending or, to the Company's Knowledge, threatened action, suit, proceeding or claim by others: (A) challenging the Company's rights in or to any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; (B) challenging the validity, enforceability or scope of any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; or (C) asserting that the Company infringes or otherwise violates, or would, upon the commercialization of any product or service described in the Registration Statement and the Prospectus as under development, infringe or violate, any copyright, patent, trademark, trade name, service mark, trade secret or other proprietary rights of others, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim. No claim has been made against the Company alleging the infringement by the Company of any patent, trademark, service mark, trade name, copyright, trade secret, license in or other intellectual property right or franchise right of any person. The Company has taken reasonable steps to protect, maintain and safeguard its Intellectual Property Rights, including the execution of appropriate nondisclosure and confidentiality agreements. The consummation of the transactions contemplated by this Agreement will not result in the loss or impairment of or payment of any additional amounts with respect to, nor require the consent of any other person in respect of, the Company's right to own, use, or hold for use any of the Intellectual Property Rights as owned, used or held for use in the conduct of the business as currently conducted. The Company has at all times complied in all material respects with all applicable laws relating to privacy, data protection, and the collection and use of personal information collected, used, or held for use by the Company in the conduct of the Company's business. No claims have been asserted or, to the Company's Knowledge, threatened against the Company alleging a violation of any person's privacy or personal information or data rights and the consummation of the transactions contemplated hereby will not breach or otherwise cause any violation of any law related to privacy, data protection, or the collection and use of personal information collected, used, or held for use by the Company in the conduct of the Company's business. The Company takes reasonable measures designed to ensure that such information is protected against unauthorized access, use, modification, or other misuse. The Company has taken commercially reasonable measures to obtain ownership of all works of authorship and inventions made by its employees, consultants and contractors during the time they were employed by or under contract with the Company and that are material to the Company's business. All founders and key employees have signed confidentiality and invention assignment agreements with the Company.

(19) The Company has valid title to, or has valid rights to lease or otherwise use, all items of real or personal property (provided, that for the sake of clarity, rights to Intellectual Property Assets are addressed exclusively in Section 5(18) above) which are material to the business of the Company, in each case free and clear of all liens, encumbrances, security interests, claims and defects other than those described in the Prospectus and those that do not, singularly or in the aggregate, 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 all of the leases and subleases material to the business of the Company and under which the Company holds properties described in the Prospectus, are in full force and effect, and the Company does not have any notice of any

material claim of any sort that has been asserted by anyone adverse to the rights of the Company under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company to the continued possession of the leased or subleased premises under any such lease or sublease.

(20) There is (i) no significant unfair labor practice complaint pending against the Company, nor to the Company's Knowledge, threatened against it, before the National Labor Relations Board, any state or local labor relation board or any foreign labor relations board, and no significant grievance or significant arbitration proceeding arising out of or under any collective bargaining agreement is so pending against the Company, or, to the Company's Knowledge, threatened against it and (ii) no material labor disturbance by the employees of the Company exists or, to the Company's Knowledge, is imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers, customers or contractors, that would be expected, singularly or in the aggregate, to have a Material Adverse Effect. The Company is not aware that any key employee or significant group of employees of the Company plans to terminate employment with the Company.

(21) No "prohibited transaction" (as defined in Section 406 of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("ERISA"), or Section 4975 of the Internal Revenue Code of 1986, as amended from time to time (the "Code")) or "accumulated funding deficiency" (as defined in Section 302 of ERISA) or any of the events set forth in Section 4043(b) of ERISA (other than events with respect to which the thirty (30)-day notice requirement under Section 4043 of ERISA has been waived) has occurred or would reasonably be expected to occur with respect to any employee benefit plan of the Company which would, singularly or in the aggregate, have a Material Adverse Effect. Each employee benefit plan of the Company is in compliance in all material respects with applicable law, including ERISA and the Code. The Company has not incurred and would not reasonably be expected to incur material liability under Title IV of ERISA with respect to the termination of, or withdrawal from, any pension plan (as defined in ERISA). Each pension plan for which the Company would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified, and to the Company's Knowledge, nothing has occurred, whether by action or by failure to act, which would, singularly or in the aggregate, cause the loss of such qualification.

(22) None of the Company or, to the Company's Knowledge, any director, officer, agent, employee, affiliate or other person associated with or acting on behalf of the Company, any director, officer, agent, employee or affiliate of the Company is currently subject to any U.S. sanctions administered by the Office of Foreign Office Control of the U.S. government (including, without limitation, the Office of Foreign Assets Control ("OFAC") of the U.S. Department of the Treasury or the U.S. Department of State and including, without limitation, the designation as a "specially designated national" or "blocked person"), the United Nations Security Council, the European Union, Her Majesty's Treasury or other relevant sanctions authority, nor is the Company's business located, organized or resident in a country or territory that is subject or target of sanctions, including, without limitation, Cuba, Iran, North Korea, Sudan and Syria; and the Company will not, directly or indirectly, use the proceeds of the offering of the Placement Securities hereunder, or lend, contribute or otherwise make available such proceeds to any joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(23) The Company is in compliance in all material respects with all foreign, federal, state and local rules, laws and regulations relating to the use, treatment, storage and disposal

of hazardous or toxic substances or waste and protection of health and safety or the environment which are applicable to their businesses (“Environmental Laws”). There has been no storage, generation, transportation, handling, treatment, disposal, discharge, emission, or other release of any kind of toxic or other wastes or other hazardous substances by, due to, or caused by the Company (or, to the Company’s Knowledge, any other entity for whose acts or omissions the Company is or may reasonably be expected to otherwise be liable) upon any of the property now or previously owned or leased by the Company, or upon any other property, in violation of any law, statute, ordinance, rule, regulation, order, judgment, decree or permit or which would, under any law, statute, ordinance, rule (including rule of common law), regulation, order, judgment, decree or permit, give rise to any liability other than any such violation or liability as would not have, singularly or in the aggregate, a Material Adverse Effect; and there has been no disposal, discharge, emission or other release of any kind onto such property or into the environment surrounding such property of any toxic or other wastes or other hazardous substances with respect to which the Company has Knowledge and which would have, singularly or in the aggregate, a Material Adverse Effect.

(24) The Company (i) has timely filed all necessary federal, state, local and foreign tax returns (or timely filed extensions with respect to such returns), and all such returns were true, complete and correct in all material respects, (ii) has paid all federal, state, local and foreign taxes, assessments, governmental or other charges due and payable for which it is liable, including, without limitation, all sales and use taxes and all taxes which the Company is obligated to withhold from amounts owing to employees, creditors and third parties (other than such amounts being disputed in good faith and by appropriate proceedings and for which appropriate reserves, if required, have been established), and (iii) does not have any tax deficiency or claims outstanding or assessed or, to its Knowledge, proposed against any of them, except those, in each of the cases described in clauses (i), (ii) and (iii) of this paragraph (24), that would not, singularly or in the aggregate, have a Material Adverse Effect. The Company has not engaged in any transaction which is a corporate tax shelter or which would be characterized as such by the Internal Revenue Service or any other taxing authority. The accruals and reserves on the books and records of the Company in respect of tax liabilities for any taxable period not yet finally determined are adequate to meet any assessments and related liabilities for any such period, and since December 31, 2020 the Company has not incurred any liability for taxes other than in the ordinary course of business.

(25) The Company carries, or is covered by, insurance in such amounts and covering such risks as generally deemed adequate and customary for the conduct of its business and the value of its properties and as is customary for companies engaged in similar businesses in similar industries. The Company does not have any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect. All policies of insurance owned by the Company are, to the Company’s Knowledge, in full force and effect and the Company is in material compliance with the terms of such policies. The Company has not received written notice from any insurer, agent of such insurer or the broker of the Company that any material capital improvements or any other material expenditures (other than premium payments) are required or necessary to be made in order to continue such insurance. The Company does not insure risk of loss through any captive insurance, risk retention group, reciprocal group or by means of any fund or pool of assets specifically set aside for contingent liabilities other than as described in the Prospectus.

(26) The Company maintains a system of internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) that complies with any applicable requirements of the Exchange Act and has been designed by the Company’s

principal executive officer and principal financial officer, or under their supervision, to provide reasonable assurances 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 GAAP and to maintain accountability for assets; (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 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 incorporated by reference in the Prospectus is accurate. Since the end of the Company's most recent audited fiscal year, there has been (A) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (B) 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's internal control over financial reporting is overseen by the Audit Committee of the Board of Directors of the Company (the "Audit Committee") in accordance with the Exchange Act Rules. As of the date of this Agreement, the Company has not publicly disclosed or reported to the Audit Committee or to the Board, and within the next 90 days the Company does not reasonably expect to publicly disclose or report to the Audit Committee or the Board, a significant deficiency, material weakness, change in internal control over financial reporting or fraud involving management or other employees who have a significant role in the internal control over financial reporting (each an "Internal Control Event"), any violation of, or failure to comply with, U.S. federal securities laws, or any financial reporting matter which, if determined adversely to the Company, would have a Material Adverse Effect.

(27) As of the date of this Agreement, and as of each date that the Company files an annual report on Form 10-K under the Exchange Act, a member of the Audit Committee has confirmed to the Chief Executive Officer or Chief Financial Officer of the Company that the Audit Committee is not reviewing or investigating, and neither the Company's independent auditors nor its internal auditors is recommending that the Audit Committee review or investigate, (i) adding to, deleting, changing the application of or changing the Company's disclosure with respect to, any of the Company's material accounting policies, (ii) any matter which would reasonably be expected to result in a restatement of the Company's financial statements for any annual or interim period during the current or prior three fiscal years, or (iii) any Internal Control Event.

(28) The Company has made and keeps books, records and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company in all material respects.

(29) The Company maintains disclosure controls and procedures (as such is defined in Rule 13a-15(e) under the Exchange Act) that comply with any applicable requirements of the Exchange Act; such disclosure controls and procedures have been reasonably designed to ensure that information required to be disclosed by the Company is accumulated and communicated to the Company's management, including the Company's principal executive officer and principal financial officer by others within the Company, and such disclosure controls and procedures are effective.

(30) As of the date hereof and as of each date that the Company files an annual report on Form 10-K under the Exchange Act or files its quarterly reports on Form 10-Q under the Exchange Act, the minute books of the Company have been made available to the Placement Agents and counsel for the Placement Agents, and such books (i) contain an accurate summary of all meetings and actions of the board of directors (including each board committee) and

stockholders of the Company since the time of its incorporation through the date of the latest meeting and action and (ii) accurately in all material respects reflect all transactions referred to in such minutes; provided, however, that no minute books have been made available to the Placement Agents for meetings subsequent to July 2, 2021, and a summary of the actions taken thereat has been communicated to the Placement Agents and counsel for the Placement Agents, as of the date hereof.

(31) There is no franchise agreement, lease, contract, or other agreement or document required by the Securities Act to be described in the Prospectus or to be filed by the Company with the Commission which is not so described or filed therewith as required; and all descriptions of any such franchise agreements, leases, contracts, or other agreements or documents, if any, contained in the Prospectus are accurate descriptions of such documents in all material respects. Other than as described in the Prospectus, no such franchise agreement, lease, contract or other agreement has been terminated, otherwise than by expiration of the agreement on its stated termination date, or as a result of all parties completing their obligations under such agreement, and such termination is material to the Company.

(32) No relationship, direct or indirect, exists between or among the Company on the one hand, and the directors, officers, stockholders (or analogous interest holders), customers or suppliers of the Company or any of its affiliates on the other hand, which is required to be described in the Prospectus and which is not so described.

(33) No person or entity has the right to require registration of shares of Common Stock or other securities of the Company within 90 days of the date hereof and there are no persons with registration rights or similar rights to have any securities registered by the Company under the Securities Act, in each case other than the registration rights held by Deerfield Private Design Fund III, L.P. pursuant to that certain Amended and Restated Investors' Rights Agreement, dated as of February 19, 2015, by and among the Company and the other parties thereto, as amended.

(34) The Company does not own any "margin securities" as that term is defined in Regulation U of the Board of Governors of the Federal Reserve System (the "Federal Reserve Board"), and none of the proceeds of the sale of the Placement Securities will be used, directly or indirectly, for the purpose of purchasing or carrying any margin security, for the purpose of reducing or retiring any indebtedness which was originally incurred to purchase or carry any margin security or for any other purpose which might cause any of the Placement Securities to be considered a "purpose credit" within the meanings of Regulation T, U or X of the Federal Reserve Board.

(35) The Company is not a party to any contract, agreement or understanding with any person that would give rise to a valid claim against the Company or the Placement Agents for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Placement Securities or any transaction contemplated by this Agreement or the Prospectus.

(36) The exercise price of each option issued under the Company's stock option or other employee benefit plans has been no less than the fair market value of a share of Common Stock as determined on the date of grant of such option. All grants of options were validly issued and properly approved by the board of directors of the Company (or a duly authorized committee thereof) in material compliance with all applicable laws and regulations and recorded in the Company's financial statements in accordance with GAAP and, to the Company's Knowledge, no such grants involved "back dating," "forward dating" or similar practice with respect to the effective date of grant.

(37) The Company is not a Passive Foreign Investment Company (“PFIC”) within the meaning of Section 1296 of the Code, and the Company is not likely to become a PFIC.

(38) No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(39) The Company is in compliance in all material respects with all applicable provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof (the “Sarbanes-Oxley Act”) that are then in effect and is taking all reasonable steps to ensure that it will be in compliance in all material respects with other applicable provisions of the Sarbanes-Oxley Act not currently in effect upon the Company at all times after the effectiveness of such provisions

(40) The Company is in compliance in all material respects with all applicable corporate governance requirements set forth in the rules of the NASDAQ Stock Market (the “NASDAQ”) that are then in effect and is taking and will take all reasonable steps to ensure that it will be in compliance with other applicable corporate governance requirements set forth in the rules of NASDAQ not currently in effect upon the Company at all times after the effectiveness of such requirements.

(41) Neither the Company nor, to the Company’s Knowledge, any director, officer, employee, agent or affiliate of the Company, has (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from corporate funds, (iii) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder, or any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, or committed an offence under the Bribery Act of 2010 of the United Kingdom, or any other applicable anti-bribery or anti-corruption law; (iv) made, offered, agreed, requested or taken an act in furtherance of any unlawful bribe or other unlawful benefit, including, without limitation, any rebate, payoff, influence payment, kickback or other unlawful or improper payment or benefit or made any other unlawful payment.

(42) There are no transactions, arrangements or other relationships between and/or among the Company, any of its affiliates (as such term is defined in Rule 405 under the Securities Act) and any unconsolidated entity, including, but not limited to, any structured finance, special purpose or limited purpose entity that would reasonably be expected to materially affect the Company’s liquidity or the availability of or requirements for its capital resources required to be described in the Prospectus which have not been described as required.

(43) There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees of indebtedness by the Company to or for the benefit of any of the officers or directors of the Company or any of their respective family members. All transactions by the Company with office holders or control persons of the Company have been duly approved by the board of directors of the Company, or duly appointed committees or officers thereof, if and to the extent required under applicable U.S. law.

(44) The statistical and market related data included or incorporated by reference in the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate, and such data is consistent with the sources from which they are derived.

(45) The operations of the Company are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the “Money Laundering Laws”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Money Laundering Laws is pending, or to the Company’s Knowledge, threatened. The Company acknowledges that, in accordance with the requirements of the USA Patriot Act, the Placement Agents are required to obtain, verify and record information that identifies its clients, including the Company, which information may include the name and address of its clients, as well as other information that will allow the Placement Agents to properly identify its clients.

(46) The Company is not Insolvent (as defined below). For purposes of this Section 5(46), “Insolvent” means, with respect to any person, (i) the present fair saleable value of such person’s assets is less than the amount required to pay such person’s total indebtedness, (ii) such person is unable to pay its debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured, (iii) such person intends to incur or believes that it will incur debts that would be beyond its ability to pay as such debts mature or (iv) such person has unreasonably small capital with which to conduct the business in which it is engaged as such business is now conducted and is proposed to be conducted.

(47) The interactive data in eXtensible Business Reporting Language incorporated by reference in 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.

(48) There has been no material security breach or other material compromise of or relating to any of the Company’s information technology and computer systems, networks, hardware, software, data (including the data of their respective customers, employees, suppliers, vendors and any third party data maintained by or on behalf of them), equipment or technology (collectively, “IT Systems and Data”) and (y) the Company has not been notified of, and has no knowledge of any event or condition that would reasonably be expected to result in, any material security breach or other material compromise to its IT Systems and Data; (ii) the Company is presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification, except as would not, in the case of this clause (ii), individually or in the aggregate, have a Material Adverse Effect; and (iii) the Company has implemented appropriate backup technology.

(49) The Company acknowledges and agrees that the Placement Agents have informed the Company that the Placement Agents may, to the extent permitted under the Securities Act and the Exchange Act, purchase and sell shares of Common Stock for their own account while this Agreement is in effect; and shall be under no obligation to purchase Securities on a principal basis pursuant to this Agreement, except as otherwise agreed by the Placement Agents in the Placement Notice (as amended by the corresponding Acceptance, if applicable); *provided*, that no

such purchase or sales shall take place while a Placement Notice is in effect (except (i) as agreed by the Designated Agent in the Placement Notice (as amended by the corresponding Acceptance, if applicable) or (ii) to the extent the Designated Agent may engage in sales of Placement Securities purchased or deemed purchased from the Company as a “riskless principal” or in a similar capacity).

(50) Except as disclosed in the Prospectus, there are no outstanding (A) securities or obligations of the Company required to be set forth in Exhibit 21.1 to the Company’s Form 10-K for the most recent fiscal year, convertible into or exchangeable for any capital stock of or partnership interests, membership interests or other equity interests, as the case may be, in the Company, (B) warrants, rights or options to subscribe for or purchase from the Company any such capital stock or any such convertible or exchangeable securities or obligations, or (C) obligations of the Company to issue any securities or obligations, any such convertible or exchangeable securities or obligations, or any such warrants, rights or options the existence of which, in each case (A), (B) and (C), is required to be disclosed in the Registration Statement and the Prospectus and are not so disclosed.

(51) Except for the Issuer Free Writing Prospectuses identified in Exhibit E hereto, the Company has not prepared, used or referred to, and will not, without the prior consent of the Placement Agents, prepare, use or refer to, any Free Writing Prospectus.

(52) The descriptions of legal or governmental proceedings, contracts, leases and other legal documents in the Prospectus constitute fair and accurate summaries of such proceedings or documents, and there are no legal or governmental proceedings, contracts, leases or other documents that are known to the Company of a character required to be described in the Prospectus or filed as exhibits to the Registration Statement which are not so described or filed; all agreements between the Company, on the one hand, and third parties, on the other, expressly referenced in the Prospectus are legal, valid and binding obligations of the Company, and, to the Company’s Knowledge, of the other parties thereto, enforceable against the Company in accordance with their respective terms, except to the extent enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors’ rights generally and by general equitable principles and the Company is not in breach or default under any such agreements, except to the extent that the indemnification and contribution may be limited by federal or state securities laws and public policy considerations in respect thereof.

(53) To the Company’s knowledge the Company has no liability under any applicable environmental, health, safety or similar law or otherwise relating to any Hazardous Material (as hereinafter defined) and there are no notices of potential liability or claims pending or, to the Company’s Knowledge, threatened against the Company or concerning any of the Properties under any applicable environmental, health, safety or similar law or otherwise relating to any Hazardous Material, except for such liabilities or claims which would not reasonably be expected to have a Material Adverse Effect; neither the Company nor, to the Company’s Knowledge, any other person, has contaminated or caused conditions that threaten to contaminate any of the Properties with Hazardous Materials, except for such contamination or threats of contamination which would not reasonably be expected to have a Material Adverse Effect; neither the Properties nor any other land ever owned by the is included on or, to the Company’s Knowledge, is proposed for inclusion on the National Priorities List pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §. 9601 et seq., or any similar list or inventory of contaminated properties. As used herein, “Hazardous Material” shall mean any hazardous material, hazardous waste, hazardous substance, hazardous constituent, toxic substance, pollutant, contaminant, asbestos, petroleum, petroleum waste, radioactive material, biohazardous material, explosive or any other material, the presence of which in the environment is prohibited, regulated, or serves as the basis of liability, as defined, listed, or regulated by any applicable federal or state environmental law, ordinance, rule, or regulation.

(54) The Company has not relied upon the Placement Agents or legal counsel for the Placement Agents for any tax advice in connection with the offering and sale of the Securities.

(55) There are no business relationships or related-party transactions involving the Company or any other person required to be described in the Prospectus which have not been described as required.

(56) The Common Stock conforms in all material respects to the descriptions thereof contained in the Prospectus.

(57) The Common Stock has been registered under Section 12(b) of the Exchange Act and the Company will provide the Placement Agents with written notice of the approval of the Securities for listing on NASDAQ, and, upon such notice, the Securities will be approved for listing on the NASDAQ, subject to official notice of issuance.

(58) The Company has not taken and will not, directly or indirectly, (i) take any action designed to cause or result in, or that constitutes or might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Placement Securities or (ii) sell, bid for, or purchase the Common Stock to be issued and sold pursuant to this Agreement, or pay anyone any compensation for soliciting purchases of the Placement Securities other than the Placement Agents; provided, however, that the Company may bid for and purchase shares of its common stock in accordance with Rule 10b-18 under the Exchange Act.

(59) Neither the Company nor any of its affiliates (A) is required to register as a “broker” or “dealer” in accordance with the provisions of the Exchange Act, or (B) directly, or indirectly through one or more intermediaries, controls or has any other association with (within the meaning of Article I of the By-laws of FINRA any member firm of FINRA.

(60) The Company has not incurred any liability for any finder’s fees or similar payments in connection with the transactions herein contemplated.

(61) Except as disclosed in the Prospectus, the Company does not have any outstanding borrowings from, or is a party to any line of credit, credit agreement or other credit facility or otherwise has a borrowing relationship with, any bank or other lending institution affiliated with either Placement Agent, and the Company does not intend to use any of the proceeds from the sale of the Securities to repay any debt owed to either Placement Agent or any affiliate thereof.

(b) *Certificates.* Any certificate signed by an officer of the Company and delivered to the Placement Agents or to counsel for the Placement Agents in connection with this Agreement shall be deemed to be a representation and warranty by the Company to the Placement Agents as to the matters set forth therein.

The Company acknowledges that the Placement Agents and, for purposes of the opinions to be delivered pursuant to Section 7 hereof, counsel to the Company and counsel to the Placement Agents, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

SECTION 6. Sale and Delivery to the Designated Agent; Settlement.

(c) *Sale of Placement Securities.* On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, upon the Designated Agent's acceptance of the terms of a Placement Notice or upon receipt by the Designated Agent of an Acceptance, as the case may be, and unless the sale of the Placement Securities described therein has been declined, suspended, or otherwise terminated in accordance with the terms of this Agreement, the Designated Agent, for the period specified in the Placement Notice, will use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable laws and regulations to sell such Placement Securities up to the amount specified, and otherwise in accordance with the terms of such Placement Notice. The Company acknowledges and agrees that (i) there can be no assurance that the Designated Agent will be successful in selling Placement Securities, (ii) the Designated Agent will incur no liability or obligation to the Company or any other person or entity if it does not sell Placement Securities for any reason other than a failure by the Designated Agent to use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable laws and regulations to sell such Placement Securities as required under this Section 6, and (iii) the Designated Agent shall be under no obligation to purchase Securities on a principal basis pursuant to this Agreement, except as otherwise agreed by the Designated Agent in the Placement Notice (as amended by the corresponding Acceptance, if applicable).

(d) *Settlement of Placement Securities.* Unless otherwise specified in the applicable Placement Notice, settlement for sales of Placement Securities will occur on the second (2nd) Trading Day (or such earlier day as is industry practice for regular-way trading) following the date on which such sales are made (each, a "Settlement Date"). The Designated Agent shall notify the Company in writing (including by email correspondence to each of the individuals set forth on Exhibit B) of each sale of Placement Securities no later than the opening of the Trading Day immediately following the Trading Day on which it has made sales of Placement Securities hereunder. The amount of proceeds to be delivered to the Company on a Settlement Date against receipt of the Placement Securities sold (the "Net Proceeds") will be equal to the aggregate sales price received by the Designated Agent at which such Placement Securities were sold, after deduction for (i) the Designated Agent's commission, discount or other compensation for such sales payable by the Company pursuant to Section 2 hereof and (ii) any other amounts due and payable by the Company to the Designated Agent hereunder pursuant to Section 8(a) hereof.

(e) *Delivery of Placement Securities.* On or before each Settlement Date, concurrently with the receipt by the Company of the Net Proceeds due to the Company in respect of such Settlement Date, the Company will, or will cause its transfer agent to, electronically transfer the Placement Securities being sold by crediting the Designated Agent's or its designee's account (provided the Designated Agent shall have given the Company written notice of such designee prior to the Settlement Date) at The Depository Trust Company through its Deposit and Withdrawal at Custodian System or by such other means of delivery through the facilities of The Depository Trust Company as may be mutually agreed upon by the parties hereto which in all cases shall be freely tradable, transferable, registered shares in good deliverable form. On each Settlement Date, the Designated Agent will deliver the related Net Proceeds in same day funds to an account designated by the Company on, or prior to, the Settlement Date. The Company agrees that if the Company, or its transfer agent (if applicable), defaults in its obligation to deliver Placement Securities on a Settlement Date (other than as a result of a failure by the Designated Agent to provide instructions for delivery), the Company agrees that, in addition to and in no way limiting the rights and obligations set forth in Section 10(a) hereto, it will (i) hold the Designated Agent harmless against any loss, claim, damage, or reasonable and documented expense (including reasonable legal fees and expenses), as incurred, arising out of or in connection with such default by the Company and (ii) pay to the Designated Agent any commission, discount, or other compensation to which it would otherwise have been entitled absent such default.

(f) *Denominations; Registration.* If requested by the Designated Agent at least two Business Days prior to the Settlement Date, then in lieu of electronic transfer, certificates for the Securities shall be in such denominations and registered in such names as the Designated Agent shall have specified in such request. The certificates for the Securities, if any, will be made available for examination and packaging by the Designated Agent in The City of New York not later than noon (New York time) on the Business Day prior to the Settlement Date.

SECTION 7. Covenants of the Company. The Company covenants with the Placement Agents as follows:

(a) *Registration Statement Amendment.* After the date of this Agreement and during any period in which a Prospectus relating to any Placement Securities is required to be delivered by the Placement Agents under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), (i) the Company will notify the Placement Agents promptly of the time when any subsequent amendment to the Registration Statement, other than documents incorporated by reference, has been filed with the Commission and/or has become effective or any subsequent supplement to the Prospectus has been filed and of any comment letter from the Commission or any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus or for additional information; (ii) the Company will prepare and file with the Commission, promptly upon the Placement Agents' reasonable request, any amendments or supplements to the Registration Statement or Prospectus that, in the Placement Agents' reasonable opinion, may be necessary or advisable in connection with the distribution of the Placement Securities by the Placement Agents (*provided, however*, that the failure of the Placement Agents to make such request shall not relieve the Company of any obligation or liability hereunder, or affect the Placement Agents' right to rely on the representations and warranties made by the Company in this Agreement and, *provided further*, that the only remedy the Placement Agents shall have with respect to the failure to make such filing shall be to cease making any sales under this Agreement until such amendment or supplement is filed); (iii) the Company will not file any amendment or supplement to the Registration Statement or Prospectus, other than documents incorporated by reference, relating to the Placement Securities or a security convertible into the Placement Securities unless a copy thereof has been submitted to the Placement Agents within a reasonable period of time before the filing and the Placement Agents have not reasonably objected thereto within a reasonable period of time (*provided, however*, that the failure of the Placement Agents to make such objection shall not relieve the Company of any obligation or liability hereunder, or affect the Placement Agents' right to rely on the representations and warranties made by the Company in this Agreement and the Company has no obligation to provide the Placement Agents any advance copy of such filing or to provide the Placement Agents any opportunity to object to such filing if such filing does not name the Placement Agents and does not relate to the transactions contemplated by this Agreement, and *provided, further*, that the only remedy the Placement Agents shall have with respect to the failure by the Company to obtain such consent shall be to cease making sales under this Agreement); (iv) the Company will furnish to the Placement Agents at the time of filing thereof a copy of any document that upon filing is deemed to be incorporated by reference into the Registration Statement or Prospectus, except for those documents available via EDGAR; and (v) the Company will cause each amendment or supplement to the Prospectus, other than documents incorporated by reference, to be filed with the Commission as required pursuant to the applicable paragraph of Rule 424(b) of the Securities Act (without reliance on Rule 424(b)(8) of the Securities Act).

(b) *Notice of Commission Stop Orders.* The Company will advise the Placement Agents, promptly after it receives notice or obtains knowledge thereof, of the issuance or threatened issuance by the

Commission of any stop order suspending the effectiveness of the Registration Statement, or of the suspension of the qualification of the Placement Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes, or of any examination pursuant to Section 8(e) of the Securities Act concerning the Registration Statement or if the Company becomes the subject of a proceeding under Section 8A of the Securities Act in connection with the offering of the Securities. The Company will use commercially reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued.

(c) *Delivery of Registration Statement and Prospectus.* Except to the extent such documents have been publicly filed with the Commission pursuant to EDGAR, the Company will furnish to the Placement Agents and their counsel (at the expense of the Company) copies of the Registration Statement, the Prospectus (including all documents incorporated by reference therein) and all amendments and supplements to the Registration Statement or Prospectus, and any Issuer Free Writing Prospectuses, that are filed with the Commission during any period in which the Prospectus is required to be delivered under the Securities Act (including all documents filed with the Commission during such period that are deemed to be incorporated by reference therein), in each case as soon as reasonably practicable and in such quantities and at such locations as the Placement Agents may from time to time reasonably request.

(d) *Continued Compliance with Securities Laws.* If at any time when a Prospectus is required by the Securities Act to be delivered in connection with a pending sale of the Placement Securities (including, without limitation, pursuant to Rule 172 under the Securities Act), any event shall occur or condition shall exist as a result of which it is necessary to amend the Registration Statement together with the Prospectus in order that the Prospectus will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser, or if it shall be necessary at any such time to amend the Registration Statement together with the Prospectus in order to comply with the requirements of the Securities Act, the Company will promptly notify the Placement Agents to suspend the offering of Placement Securities during such period and the Company will promptly prepare and file with the Commission such amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement and the Prospectus comply with such requirements, and the Company will furnish to the Placement Agents such number of copies of such amendment or supplement as the Placement Agents may reasonably request. If at any time following the issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted, conflicts or would conflict with the information contained in the Registration Statement or the Prospectus or included, includes or would include an untrue statement of a material fact or together with the Prospectus omitted, omits or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances, prevailing at that subsequent time, not misleading, the Company will promptly notify the Placement Agents to suspend the offering of Placement Securities during such period and the Company will, subject to Section 7(a) hereof, promptly amend or supplement such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission. Notwithstanding the foregoing, the Company may delay any amendment or supplement required by this Section 7(d) if, in the reasonable judgment of the Company, it is in the best interests of the Company to do so.

(e) *Blue Sky and Other Qualifications.* The Company will use its commercially reasonable efforts, in cooperation with the Placement Agents, to qualify the Placement Securities for offering and sale, or to obtain an exemption for the Securities to be offered and sold, under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Placement Agents may designate and to maintain such qualifications and exemptions in effect for so long as required for the distribution of the Securities (but in no event for less than one year from the date of this Agreement); *provided, however*, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign

corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject. In each jurisdiction in which the Placement Securities have been so qualified or exempt, the Company will file such statements and reports as may be required by the laws of such jurisdiction to continue such qualification or exemption, as the case may be, in effect for so long as required for the distribution of the Placement Securities (but in no event for less than one year from the date of this Agreement).

(f) *Rule 158.* The Company will timely file such reports pursuant to the Exchange Act as are necessary in order to make generally available to its securityholders as soon as practicable an earnings statement for the purposes of, and to provide to the Placement Agents the benefits contemplated by, the last paragraph of Section 11(a) of the Securities Act.

(g) *Use of Proceeds.* The Company will use the net proceeds received by it from the sale of the Securities in the manner specified in the Prospectus under "Use of Proceeds."

(h) *Listing.* During any period in which the Prospectus is required to be delivered by the Placement Agents under the Securities Act with respect to a pending sale of the Placement Securities (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), the Company will use its commercially reasonable efforts to cause the Placement Securities to be listed on the NASDAQ.

(i) *Filings with the NASDAQ.* The Company will timely seek to file with the NASDAQ all material documents and notices required by the NASDAQ.

(j) *Reporting Requirements.* The Company, during any period when the Prospectus is required to be delivered under the Securities Act and the Exchange Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), will file all documents required to be filed with the Commission pursuant to the Exchange Act within the time periods required by the Exchange Act.

(k) *Notice of Other Sales.* Upon the issuance and during the pendency of any Placement Notice given hereunder, the Company shall provide the Placement Agents notice as promptly as reasonably practicable before it offers to sell, contracts to sell, sells, grants any option to sell or otherwise disposes of any shares of Common Stock (other than Placement Securities offered pursuant to the provisions of this Agreement) or securities convertible into or exchangeable for Common Stock, warrants or any rights to purchase or acquire Common Stock; *provided*, that such notice shall not be required in connection with the (i) issuance, grant or sale of restricted stock, Common Stock, options to purchase shares of Common Stock, restricted stock or other stock awards or Common Stock issuable upon the exercise or vesting of options or other equity awards pursuant to any stock option, stock bonus or other stock or compensatory plan or arrangement described in the Registration Statement or the Prospectus, (ii) the issuance of shares of Common Stock upon conversion of securities or the exercise of warrants, options or other rights in effect or outstanding as of the date of this Agreement, and disclosed in filings by the Company available on EDGAR or otherwise in writing to the Placement Agents, (iii) the issuance of securities in connection with an acquisition, merger, sale or purchase of assets, other business combination, or strategic alliance occurring after the date of this Agreement and conducted in a manner so as to not be integrated with the offering of Securities hereby, or (iv) the issuance or sale of Common Stock pursuant to any dividend reinvestment plan that the Company has in effect or may adopt from time to time, *provided* the implementation of such new plan is disclosed to the Placement Agents in advance. Notwithstanding the foregoing provisions, nothing herein shall be construed to restrict the Company's ability, or require the Company to provide notice to the Placement Agents, to file a registration statement under the Securities Act.

(l) *Change of Circumstances.* The Company will, at any time upon the issuance and during the pendency of a Placement Notice, advise the Placement Agents promptly after it shall have received notice or obtained knowledge thereof, of any information or fact that would alter or affect in any material respect any opinion, certificate, letter or other document provided to the Placement Agents pursuant to this Agreement.

(m) *Due Diligence Cooperation.* During the term of this Agreement, the Company will cooperate with any reasonable due diligence review conducted by the Placement Agents or their agents in connection with the transactions contemplated hereby, including, without limitation, providing information and making available documents and senior corporate officers, during regular business hours and at the Company's principal offices, as the Placement Agents may reasonably request.

(n) *Disclosure of Sales.* The Company will, if applicable, disclose in its quarterly reports on Form 10-Q and in its annual report on Form 10-K the number of Placement Securities sold through the Placement Agents during the most recent completed fiscal quarter, the Net Proceeds to the Company and the compensation paid or payable by the Company to the Placement Agents with respect to such Placement Securities.

(o) *Representation Dates; Certificate.* On or prior to the date that the Securities are first sold pursuant to the terms of this Agreement and:

(i) each time the Company files the Equity Distribution Prospectus or amends or supplements the Registration Statement or the Equity Distribution Prospectus (other than amendments or supplements that are filed solely to report sales of the Placement Securities pursuant to this Agreement) by means of a post-effective amendment, sticker, or supplement but not by means of incorporation of documents by reference into the Registration Statement or the Equity Distribution Prospectus;

(ii) each time the Company files an annual report on Form 10-K under the Exchange Act;

(iii) each time the Company files its quarterly reports on Form 10-Q under the Exchange Act; or

(iv) each time the Company files a report on Form 8-K containing amended financial information (other than an earnings release, to "furnish" information pursuant to Items 2.02 or 7.01 of Form 8-K or to provide disclosure pursuant to Item 8.01 of Form 8-K relating to the reclassifications of certain properties as discontinued operations in accordance with Statement of Financial Accounting Standards No. 144) under the Exchange Act (each date of filing of one or more of the documents referred to in clauses (i) through (iv) shall be a "Representation Date");

the Company shall furnish the Placement Agents with a certificate, in the form attached hereto as Exhibit D, within three (3) Trading Days of any Representation Date if required by the Placement Agents. The requirement to provide a certificate under this Section 7(o) shall be waived for any Representation Date occurring at a time at which no Placement Notice is pending, which waiver shall continue until the date the Company delivers a Placement Notice hereunder (which for such calendar quarter shall be considered a Representation Date); *provided, however*, that such waiver shall not apply for any Representation Date on which the Company files its annual report on Form 10-K. Notwithstanding the foregoing, if the Company subsequently decides to sell Placement Securities following a Representation Date when the Company relied on such waiver and did not provide the Placement Agents with a certificate under this Section 7(o), then before the Company delivers the Placement Notice or the Placement Agents sell any Placement Securities, the Company shall provide the Placement Agents with a certificate, in the form attached hereto as Exhibit D, dated the date of the Placement Notice.

(p) *Legal Opinions.* On or prior to the date that the Securities are first sold pursuant to the terms of this Agreement and within three (3) Trading Days after each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as Exhibit D for which no waiver is applicable, the Company shall cause to be furnished to the Placement Agents (i) a written opinion and negative assurance letter of Cooley LLP, corporate counsel to the Company (“Company Corporate Counsel”), or other counsel reasonably satisfactory to the Placement Agents, in form and substance reasonably satisfactory to the Placement Agents and their counsel, dated the date that the opinion is required to be delivered, in form and substance satisfactory to the Placement Agent, and (ii), unless waived by the Placement Agents, a written opinion of Duane Morris LLP, counsel to the Placement Agents (“Counsel to the Placement Agents”), or other counsel reasonably satisfactory to the Placement Agents, in form and substance reasonably satisfactory to the Placement Agents, dated the date that the opinion is required to be delivered; *provided, however*, that in lieu of such opinions for subsequent Representation Dates, counsel may furnish the Placement Agents with a letter (a “Reliance Letter”) to the effect that the Placement Agents may rely on a prior opinion and negative assurance letter delivered under this Section 7(p) to the same extent as if it were dated the date of such letter (except that statements in such prior opinion and negative assurance letter shall be deemed to relate to the Registration Statement and the Prospectus as amended or supplemented at such Representation Date).

(q) *Comfort Letter.* On or prior to the date that the Securities are first sold pursuant to the terms of this Agreement and within three (3) Trading Days after each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as Exhibit D for which no waiver is applicable, the Company shall cause its independent accountants (and any other independent accountants whose report is included in the Prospectus) to furnish the Placement Agents letters (the “Comfort Letters”), dated the date the Comfort Letter is delivered, in form and substance satisfactory to the Placement Agents, (i) confirming that they are an independent registered public accounting firm within the meaning of the Securities Act, the Exchange Act and the PCAOB, (ii) stating, as of such date, the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants’ “comfort letters” to underwriters in connection with registered public offerings.

(r) *Market Activities.* The Company will not, directly or indirectly, (i) take any action designed to cause or result in, or that constitutes or would reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities or (ii) sell, bid for, or purchase the Securities in violation of Regulation M, or pay anyone any compensation for soliciting purchases of the Securities to be issued and sold pursuant to this Agreement other than the Placement Agents; *provided, however*, that the Company may bid for and purchase shares of Common Stock in accordance with Rule 10b-18 under the Exchange Act.

(s) *Securities Act and Exchange Act.* The Company will use its best efforts to comply with all requirements imposed upon it by the Securities Act and the Exchange Act as from time to time in force, so far as necessary to permit the continuance of sales of, or dealings in, the Placement Securities as contemplated by the provisions hereof and the Prospectus.

(t) *No Offer to Sell.* Other than a free writing prospectus (as defined in Rule 405 under the Securities Act) approved in advance in writing by the Company and the Placement Agents in their capacity as principal or agent hereunder, neither the Placement Agents nor the Company (including its agents and representatives, other than the Placement Agents in their capacity as such) will make, use, prepare, authorize, approve or refer to any written communications (as defined in Rule 405 under the Securities Act), required to be filed with the Commission, that constitutes an offer to sell or solicitation of an offer to buy shares of Common Stock hereunder.

(u) *Sarbanes-Oxley Act*. The Company will use commercially reasonable efforts to comply with all effective applicable provisions of the Sarbanes-Oxley Act of 2002.

SECTION 8. Payment of Expenses. The Company will pay all expenses incident to the performance of its obligations under this Agreement, including (i) the preparation, printing and filing of the Registration Statement (including financial statements and exhibits) as originally filed and of each amendment and supplement thereto, (ii) the word processing, printing and delivery to the Placement Agents of this Agreement and such other documents as may be required in connection with the offering, purchase, sale, issuance or delivery of the Placement Securities, (iii) the preparation, issuance and delivery of the certificates for the Placement Securities to the Placement Agents, including any stock or other transfer taxes and any capital duties, stamp duties or other duties or taxes payable upon the sale, issuance or delivery of the Placement Securities to the Placement Agents, (iv) the fees and disbursements of the counsel, accountants and other advisors to the Company, (v) the qualification or exemption of the Placement Securities under securities laws in accordance with the provisions of Section 7(e) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Placement Agents in connection therewith and in connection with the preparation of the Blue Sky Survey and any supplements thereto, (vi) the printing and delivery to the Placement Agents of copies of any permitted Free Writing Prospectus and the Prospectus and any amendments or supplements thereto and any costs associated with electronic delivery of any of the foregoing by the Placement Agents to investors, (vii) the fees and expenses of the transfer agent and registrar for the Securities, (viii) the filing fees incident to, and the reasonable fees and disbursements of counsel to the Placement Agents in connection with, the review by FINRA of the terms of the sale of the Securities, (ix) the fees and expenses incurred in connection with the listing of the Placement Securities on the NASDAQ, (x) the reasonable fees and disbursements of counsel for the Placement Agents and (xi) the reasonable costs and expenses of the Placement Agents, including without limitation the fees set forth in Subsection (v), (viii) and (x) of this Section 8, which shall not exceed \$50,000 in the aggregate.

SECTION 9. Conditions of the Placement Agents' Obligations. The obligations of the Placement Agents hereunder with respect to a Placement will be subject to the continuing accuracy and completeness of the representations and warranties of the Company contained in this Agreement or in certificates of any officer of the Company delivered pursuant to the provisions hereof, to the performance by the Company of its covenants and other obligations hereunder, and to the following further conditions:

(a) *Opinions of Company Corporate Counsel and Counsel to the Placement Agents*. On or prior to the date that Securities are first sold pursuant to the terms of this Agreement the Company shall furnish to the Placement Agents the opinions, each addressed to the Placement Agents, of (i) Cooley LLP, corporate counsel for the Company, or other counsel satisfactory to the Placement Agents, in form and substance reasonably satisfactory to the Placement Agents and their counsel, dated the date that the opinion is required to be delivered, in form and substance satisfactory to the Placement Agents; and (ii), unless waived by the Placement Agents, Duane Morris LLP, counsel to the Placement Agents, or other counsel satisfactory to the Placement Agents, in form and substance reasonably satisfactory to the Placement Agents dated the date that the opinion is required to be delivered.

(b) *Effectiveness of Registration Statement*. The Registration Statement and any Rule 462(b) Registration Statement shall have become effective and shall be available for (i) all sales of Placement Securities sold pursuant to all prior Placement Notices and (ii) the sale of all Placement Securities contemplated to be sold by any Placement Notice.

(c) *No Material Notices.* None of the following events shall have occurred and be continuing: (i) receipt by the Company of any request for additional information from the Commission or any other federal or state governmental authority during the period of effectiveness of the Registration Statement, the response to which would require any post-effective amendments or supplements to the Registration Statement or the Prospectus; (ii) the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose; (iii) receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Placement Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; (iv) the occurrence of any event that makes any material statement made in the Registration Statement or the Prospectus, or any Issuer Free Writing Prospectus, or any material document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires the making of any changes in the Registration Statement, the Prospectus, or any Issuer Free Writing Prospectus, or such documents so that, in the case of the Registration Statement, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading and, that in the case of the Prospectus and any Issuer Free Writing Prospectus, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(d) *No Misstatement or Material Omission.* The Placement Agents shall not have advised the Company that the Registration Statement contains an untrue statement of fact that in the Placement Agents' reasonable opinion is material, or omits to state a fact that in the Placement Agents' opinion is material and is required to be stated therein or is necessary to make the statements therein not misleading, or that the Prospectus, or any Issuer Free Writing Prospectus or any amendment or supplement thereto, contains an untrue statement of fact that in the Placement Agents' reasonable opinion is material, or omits to state a fact that in the Placement Agents' opinion is material and is required to be stated therein or is necessary to make the statements therein, in the light of the circumstances in which they were made, not misleading

(e) *Material Changes.* Except as contemplated in the Prospectus, or disclosed in the Company's reports filed with the Commission, there shall not have been any Material Adverse Change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company, whether or not arising in the ordinary course of business that, in the reasonable judgment of the Placement Agents, is so material as to make it impracticable or inadvisable to proceed with the offering of the Placement Securities on the terms and in the manner contemplated in the Prospectus.

(f) *Representation Certificate.* The Placement Agents shall have received the certificate required to be delivered pursuant to Section 7(o) on or before the date on which delivery of such certificate is required pursuant to Section 7(o).

(g) *Legal Opinions and Negative Assurance Letter.* The Placement Agents shall have received the opinions and negative assurance letter of Company Corporate Counsel required to be delivered pursuant to Section 7(p) on or before the date on which delivery of such opinion and negative assurance letter is required pursuant to Section 7(p).

(h) *Accountant's Comfort Letter.* The Placement Agents shall have received the Comfort Letter required to be delivered pursuant to Section 7(q) on or before the date on which such delivery of such letter is required pursuant to Section 7(q).

(i) *Secretary's Certificate.* On the date of this Agreement, the Placement Agents shall have received a certificate, signed on behalf of the Company by its corporate Secretary, in form and substance reasonably satisfactory to the Placement Agents and their counsel.

(j) *Approval for Listing.* The Placement Securities shall either have been (i) approved for listing on NASDAQ, subject only to notice of issuance, or (ii) the Company shall have submitted a notification of listing of the Placement Securities on the NASDAQ at, or prior to, the issuance of any Placement Notice.

(k) *No Suspension.* Trading in the Securities shall not have been suspended on the NASDAQ.

(l) *Additional Documents.* On each date on which the Company is required to deliver a certificate pursuant to Section 7(o), counsel for the Placement Agents shall have been furnished with such documents and opinions as they shall have reasonably requested for the purpose of enabling them to pass upon the issuance and sale of the Securities as herein contemplated, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, contained in this Agreement.

(m) *Securities Act Filings Made.* All filings with the Commission required by Rule 424 under the Securities Act to have been filed prior to the issuance of any Placement Notice hereunder shall have been made within the applicable time period prescribed for such filing by Rule 424 under the Securities Act.

(n) *Termination of Agreement.* If any condition specified in this Section 9 shall not have been fulfilled when and as required to be fulfilled, this Agreement may be terminated by the Placement Agents by notice to the Company, and such termination shall be without liability of any party to any other party except as provided in Section 7 hereof and except that, in the case of any termination of this Agreement, Sections 5, 10, 11 and 19 hereof shall survive such termination and remain in full force and effect.

SECTION 10. Indemnity and Contribution by the Company and the Placement Agents.

(o) *Indemnification by the Company.* The Company agrees to indemnify, defend and hold harmless the Placement Agents and any person who controls the Placement Agents, respectively, within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any loss, expense, liability, damage or claim (including the reasonable cost of investigation) which, jointly or severally, the Placement Agents or any controlling person may incur under the Securities Act, the Exchange Act or otherwise, insofar as such loss, expense, liability, damage or claim arises out of or is based upon (1) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereof), any Issuer Free Writing Prospectus that the Company has filed or was required to file with the Commission or the Prospectus (the term Prospectus for the purpose of this Section 10 being deemed to include the Prospectus as of its date and as amended or supplemented by the Company), (2) any omission or alleged omission to state a material fact required to be stated in any such Registration Statement, or necessary to make the statements made therein not misleading, or (3) any omission or alleged omission from any such Issuer Free Writing Prospectus or Prospectus of a material fact necessary to make the statements made therein, in the light of the circumstances under which they were made, not misleading; *except*, in the case of each of clauses (1), (2) and (3), insofar as any such loss, expense, liability, damage or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact or any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of the Prospectus and any Issuer Free Writing Prospectus, in the light of the circumstances under which they were made) not misleading, in each such case, to the extent contained in and in conformity with information furnished in writing the Placement Agents to the Company expressly

for use therein (that information being limited to that described in Section 10(b) hereof). The indemnity agreement set forth in this Section 10(a) shall be in addition to any liability which the Company may otherwise have. If any action is brought against the Placement Agents or any controlling person in respect of which indemnity may be sought against the Company pursuant to the foregoing paragraph of this Section 10(a), the Placement Agents shall promptly notify the Company, as the case may be, in writing of the institution of such action, and the Company, as the case may be, shall if it so elects, assume the defense of such action, including the employment of counsel and payment of expenses; *provided, however*, that any failure or delay to so notify the Company, as the case may be, will not relieve the Company of any obligation hereunder, except to the extent that its ability to defend is materially prejudiced by such failure or delay. The Placement Agents or such controlling person shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of the Placement Agents or such controlling person unless the employment of such counsel shall have been authorized in writing by the Company, as the case may be, in connection with the defense of such action, or the Company shall not have employed counsel reasonably satisfactory to the Placement Agents or such controlling person, as the case may be, to have charge of the defense of such action within a reasonable time or such indemnified party or parties shall have reasonably concluded (based on the advice of counsel) that there may be defenses available to it or them which are different from or additional to those available to the Company (in which case the Company shall not have the right to direct the defense of such action on behalf of the indemnified party or parties), in any of which events such fees and expenses shall be borne by the Company and paid as incurred (it being understood, however, that the Company shall not be liable for the expenses of more than one separate firm of attorneys for the Placement Agents or such controlling persons in any one action or series of related actions in the same jurisdiction (other than local counsel in any such jurisdiction) representing the indemnified parties who are parties to such action). Anything in this paragraph to the contrary notwithstanding, the Company shall not be liable for any settlement of any such claim or action effected without its consent.

(p) *Indemnification by the Placement Agents.* The Placement Agents agree, severally and not jointly, to indemnify, defend and hold harmless the Company, the Company's directors, the Company's officers that signed the Registration Statement, any person who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any loss, expense, liability, damage or claim (including the reasonable cost of investigation) which, jointly or severally, the Company or any such person may incur under the Securities Act, the Exchange Act or otherwise, insofar as such loss, expense, liability, damage or claim arises out of or is based upon (1) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereof), any Issuer Free Writing Prospectus that the Company has filed or was required to file with the Commission, the Prospectus, (2) any omission or alleged omission to state a material fact required to be stated in any such Registration Statement, or necessary to make the statements made therein not misleading, or (3) any omission or alleged omission from any such Issuer Free Writing Prospectus or the Prospectus of a material fact necessary to make the statements made therein, in the light of the circumstances under which they were made, not misleading, but in each case only insofar as such untrue statement or alleged untrue statement or omission or alleged omission was made in such Registration Statement, Issuer Free Writing Prospectus or Prospectus in reliance upon and in conformity with information furnished in writing by the Placement Agents to the Company expressly for use therein. The statements set forth in the eighth paragraph under the caption "Plan of Distribution" in the Equity Distribution Prospectus (to the extent such statements relate to the Placement Agents) constitute the only information furnished by or on behalf of the Placement Agents to the Company for the purposes of Section 5(a)(1) and this Section 10. The indemnity agreement set forth in this Section 10(b) shall be in addition to any liabilities that the Placement Agents may otherwise have.

If any action is brought against the Company or any such person in respect of which indemnity may be sought against the Placement Agents pursuant to the foregoing paragraph, the Company or such

person shall promptly notify the Placement Agents in writing of the institution of such action and the Placement Agents shall if they so elects assume the defense of such action, including the employment of counsel and payment of expenses; *provided, however*, that any failure or delay to so notify the Placement Agents will not relieve the Placement Agents of any obligation hereunder, except to the extent that its ability to defend is materially prejudiced by such failure or delay. The Company or such person shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of the Company or such person unless the employment of such counsel shall have been authorized in writing by the Placement Agents in connection with the defense of such action or the Placement Agents shall not have employed counsel reasonably satisfactory to the Company or such person, as the case may be, to have charge of the defense of such action within a reasonable time or such indemnified party or parties shall have reasonably concluded (based on the advice of counsel) that there may be defenses available to it or them which are different from or additional to those available to (in which case the Placement Agents shall not have the right to direct the defense of such action on behalf of the indemnified party or parties), in any of which events such fees and expenses shall be borne by the Placement Agents and paid as incurred (it being understood, however, that the Placement Agents shall not be liable for the expenses of more than one separate firm of attorneys in any one action or series of related actions in the same jurisdiction (other than local counsel in any such jurisdiction) representing the indemnified parties who are parties to such action). Anything in this paragraph to the contrary notwithstanding, the Placement Agents shall not be liable for any settlement of any such claim or action effected without its written consent.

(q) *Contribution*. If the indemnification provided for in this Section 10 is unavailable or insufficient to hold harmless an indemnified party under subsections (a) and (b) of this Section 10 in respect of any losses, expenses, liabilities, damages or claims referred to therein, then each applicable indemnifying party, in lieu of indemnifying such indemnified party, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, expenses, liabilities, damages or claims (i) in such proportion as is appropriate to reflect the relative benefits received by the Company and by a Placement Agent, each from the offering of the Securities, or (ii) if (but only if) the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company and such Placement Agent in connection with the statements or omissions which resulted in such losses, expenses, liabilities, damages or claims, as well as any other relevant equitable considerations. The relative benefits received by the Company shall be deemed to be equal to the gross proceeds from the offering of Securities (before deducting discounts and expenses) received by each of them and benefits received by such Placement Agent shall be deemed to be equal to the discounts and commissions received by such Placement Agent. The relative fault of the Company and of such Placement Agent shall be determined by reference to, among other things, whether the untrue statement or alleged untrue statement of a material fact or omission or alleged omission relates to information supplied by the Company or by such Placement Agent and the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The amount paid or payable by a party as a result of the losses, claims, damages and liabilities referred to above shall be deemed to include any legal or other fees or expenses reasonably incurred by such party in connection with investigating or defending any claim or action.

(r) The Company and the Placement Agents agree that it would not be just and equitable if contribution pursuant to this Section 10 were determined by *pro rata* allocation or by any other method of allocation which does not take account of the equitable considerations referred to in clause (i) and, if applicable, clause (ii) of subsection (c) above. Notwithstanding the provisions of this Section 10, a Placement Agent shall not be required to contribute any amount in excess of the discounts and commissions applicable to the Securities sold by such Placement Agent and the liability of the Company pursuant to this Section 10 shall not exceed the gross proceeds received by the Company (before deducting discounts and expenses). No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

SECTION 11. Representations, Warranties and Agreements to Survive Delivery. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company submitted pursuant hereto, shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of the Placement Agents or controlling person, or by or on behalf of the Company, and shall survive delivery of the Securities to the Placement Agents.

SECTION 12. Termination of Agreement.

(s) *Termination; General*. Either Placement Agent may terminate this Agreement with respect to such Placement Agent, by notice to the Company, as hereinafter specified at any time (i) if there has been, since the time of execution of this Agreement or since the date as of which information is given in the Prospectus, any Material Adverse Change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company, whether or not arising in the ordinary course of business, or (ii) if there has occurred any Material Adverse Change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of such Placement Agent, impracticable or inadvisable to market the Securities or to enforce contracts for the sale of the Securities, or (iii) if trading in the Placement Securities has been suspended or limited by the Commission or the NASDAQ, or if trading generally on the American Stock Exchange, the NYSE or the NASDAQ has been suspended or limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by order of the Commission, the FINRA or any other governmental authority, or a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States, or (iv) if a banking moratorium has been declared by either Federal or New York State authorities.

(t) *Termination by the Company*. The Company shall have the right, by giving one (1) day notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement, with respect to one or more Placement Agents. Upon termination of this Agreement pursuant to this Section 12(b), any outstanding Placement Notices shall also be terminated.

(u) *Termination by a Placement Agent*. A Placement Agent shall have the right, by giving one (1) day notice as hereinafter specified to terminate this Agreement, with respect to such Placement Agent, in its sole discretion at any time after the date of this Agreement.

(v) *Automatic Termination*. Unless earlier terminated pursuant to this Section 12, this Agreement shall automatically terminate upon the issuance and sale of all of the Placement Securities through the Placement Agents on the terms and subject to the conditions set forth herein.

(w) *Continued Force and Effect*. This Agreement shall remain in full force and effect unless terminated pursuant to Sections 12(a), (b), (c), or (d) above or otherwise by mutual agreement of the parties.

(x) *Effectiveness of Termination*. Any termination of this Agreement shall be effective on the date specified in such notice of termination; provided, however, that such termination shall not be effective until the close of business on the date of receipt of such notice by the Placement Agent(s) or the Company, as the case may be. If such termination shall occur prior to the Settlement Date for any sale of Placement Securities, such Placement Securities shall settle in accordance with the provisions of this Agreement.

(y) Liabilities. If this Agreement is terminated pursuant to this Section 12, such termination shall be without liability of any party to any other party except as provided in Section 8 hereof, and except that, in the case of any termination of this Agreement, Section 5, Section 10, Section 11 and Section 19 hereof shall survive such termination and remain in full force and effect.

SECTION 13. Notices. Except as otherwise provided in this Agreement, all notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Placement Agents shall be directed to the respective Placement Agents at JMP Securities LLC, 600 Montgomery Street, Suite 1100, San Francisco, California 94111, Facsimile: (415) 835-8920, Attention: Equity Securities, and RBC Capital Markets, LLC, Attention: Equity Syndicate, 200 Vesey Street, 8th Floor, New York, New York 10281, Attention: TJ Opladen, facsimile: (212) 428-6260, email: tj.opladen@rbccm.com, with a copy to Duane Morris LLP, 1540 Broadway, New York, NY 10036, Attention: James T. Seery, email: jtseery@duanemorris.com and notices to the Company shall be directed to it at the offices of the Company at 1180 Celebration Boulevard, Suite 103, Celebration, FL 34747, Attention: Travis C. Mickle, email: travis@kempharm.com, with a copy to Brent B. Siler, email: bsiler@cooley.com.

SECTION 14. Parties. This Agreement shall inure to the benefit of and be binding upon the Placement Agents, the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Placement Agents, the Company and their respective successors and the controlling persons and officers and directors referred to in Section 10 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Placement Agents, the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Securities from the Placement Agents shall be deemed to be a successor by reason merely of such purchase.

SECTION 15. Adjustments for Stock Splits. The parties acknowledge and agree that all stock-related numbers contained in this Agreement shall be adjusted to take into account any stock split, stock dividend or similar event effected with respect to the Securities.

SECTION 16. Governing Law; Time; Waiver of Jury Trial. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK. SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME. THE COMPANY AND THE PLACEMENT AGENTS EACH HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY CLAIM BASED ON OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

SECTION 17. Effect of Headings. The Section and Exhibit headings herein are for convenience only and shall not affect the construction hereof.

SECTION 18. Permitted Free Writing Prospectuses. The Company represents, warrants and agrees that, unless it obtains the prior consent of the Placement Agents, which consent shall not be unreasonably withheld, conditioned or delayed, and each Placement Agent represents, warrants and agrees that, unless it obtains the prior consent of the Company, which consent shall not be unreasonably withheld, conditioned or delayed, it has not made and will not make any offer relating to the Securities that would constitute an Issuer Free Writing Prospectus, or that would otherwise constitute a "free writing prospectus," as defined in Rule 405 under the Securities Act, required to be filed with the Commission. Any such free

writing prospectus consented to by the Placement Agents or by the Company, as the case may be, is hereinafter referred to as a "Permitted Free Writing Prospectus." The Company represents and warrants that it has treated and agrees that it will treat each Permitted Free Writing Prospectus as an "issuer free writing prospectus," as defined in Rule 433 under the Securities Act, and has complied and will comply with the requirements of Rule 433 under the Securities Act applicable to any Permitted Free Writing Prospectus, including timely filing with the Commission where required, legending and record keeping. For the purposes of clarity, the parties hereto agree that all free writing prospectuses, if any, listed in Exhibit E hereto, as modified from time to time, are Permitted Free Writing Prospectuses.

SECTION 19. Absence of Fiduciary Relationship. The Company acknowledges and agrees that:

(z) Each Placement Agent is acting solely as agent and/or principal in connection with the public offering of the Securities and in connection with each transaction contemplated by this Agreement and the process leading to such transactions, and no fiduciary or advisory relationship between the Company or any of its respective affiliates, stockholders (or other equity holders), creditors or employees or any other party, on the one hand, and each Placement Agent, on the other hand, has been or will be created in respect of any of the transactions contemplated by this Agreement, irrespective of whether or not such Placement Agent has advised or is advising the Company on other matters, and the Placement Agents have no obligation to the Company with respect to the transactions contemplated by this Agreement except the obligations expressly set forth in this Agreement;

(aa) the public offering price of the Securities was not established by the Placement Agents; it is capable of evaluating and understanding, and understands and accepts, the terms, risks and conditions of the transactions contemplated by this Agreement;

(bb) the Placement Agents have not provided any legal, accounting, regulatory or tax advice with respect to the transactions contemplated by this Agreement and each Placement Agent has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate;

(cc) it is aware that the Placement Agents and their respective affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and the Placement Agents have no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship or otherwise; and

(dd) it waives, to the fullest extent permitted by law, any claims it may have against the Placement Agents for breach of fiduciary duty or alleged breach of fiduciary duty and agrees that the Placement Agents shall not have any liability (whether direct or indirect, in contract, tort or otherwise) to it in respect of such a fiduciary duty claim or to any person asserting a fiduciary duty claim on its behalf or in right of it or the Company, employees or creditors of Company.

[Signature Page Follows]

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement by and between the Placement Agents and the Company in accordance with its terms.

Very truly yours,

KEMPHARM, INC.

By: /s/ R. LaDuane Clifton

Name: R. LaDuane Clifton

Title: Chief Financial Officer, Treasurer and
Secretary

CONFIRMED AND ACCEPTED, as of the date first above written:

JMP SECURITIES LLC

By /s/ David Kellman

Name: David Kellman

Title: Managing Director & Head of Healthcare
Investment Banking

RBC CAPITAL MARKETS, LLC

By /s/ Andrew S. Callaway

Name: Andrew S. Callaway

Title: Managing Director

EXHIBIT A

FORM OF PLACEMENT NOTICE

From: []
Cc: []
To: []
Date: []

Subject: Equity Distribution—Placement Notice

Gentlemen:

Pursuant to the terms and subject to the conditions contained in the Equity Distribution Agreement between KemPharm, Inc. (the "Company"), JMP Securities LLC and RBC Capital Markets, LLC (the "Placement Agents") dated July 2, 2021 (the "Agreement"), I hereby request on behalf of the Company that [JMP Securities LLC][RBC Capital Markets, LLC] [sell up to [] shares of the Company's common stock, par value \$0.0001 per share, at a minimum market price of \$[] per share.

[ADDITIONAL SALES PARAMETERS MAY BE ADDED, SUCH AS THE MAXIMUM AGGREGATE OFFERING PRICE, THE TIME PERIOD IN WHICH SALES ARE REQUESTED TO BE MADE, SPECIFIC DATES THE SHARES MAY NOT BE SOLD ON, THE MANNER IN WHICH SALES ARE TO BE MADE BY THE PLACEMENT AGENTS, AND/OR THE CAPACITY IN WHICH THE PLACEMENT AGENTS MAY ACT IN SELLING SHARES (AS PRINCIPAL, AGENT, OR BOTH)]

EXHIBIT B

AUTHORIZED INDIVIDUALS FOR PLACEMENT NOTICES AND ACCEPTANCES

JMP Securities LLC

Name

Aidan Whitehead, Managing Director
Adrienne Tam, Chief Compliance Officer
Andrew Mertz, Managing Director
Kenneth Clausman, Managing Director

Email

awhitehead@jmpsecurities.com
atam@jmpsecurities.com
amertz@jmpsecurities.com
kclausman@jmpsecurities.com

RBC Capital Markets, LLC

Name

TJ Opladen, Director

Email

tj.opladen@rbccm.com

KemPharm, Inc.

Name

Travis C. Mickle, Chief Executive Officer
R. LaDuane Clifton, Chief Financial Officer
Timothy J. Sangiovanni, Corporate Controller

Email

tmickle@kempharm.com
lclifton@kempharm.com
tsangiovanni@kempharm.com

EXHIBIT C

COMPENSATION

Each Designated Agent shall be paid compensation equal to 3.0% of the gross proceeds from the sales of Placement Securities by such Designated Agent pursuant to the terms of this Agreement.

OFFICER CERTIFICATE

The undersigned Travis C. Mickle and R. LaDuane Clifton are the Chief Executive Officer and Chief Financial Officer, respectively, of KemPharm, Inc., a Delaware corporation (the "Company"). The undersigned hereby execute this Certificate in connection with the closing held as of the date hereof pursuant to the terms of that certain Equity Distribution Agreement, dated July 2, 2021 (the "Equity Distribution Agreement"), between the Company, JMP Securities LLC and RBC Capital Markets, LLC. Capitalized terms used herein without definition shall have the meanings given to such terms in the Equity Distribution Agreement.

The undersigned each hereby further certifies, in their respective capacities as officers of the Company, in its own capacity that:

1. The representations and warranties of the Company in the Equity Distribution Agreement are true and correct, as if made on and as of the date hereof, and the Company have complied with all of its obligations thereunder and satisfied all of the conditions on their part to be performed or satisfied at or prior to the date hereof;
2. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued and no proceedings for that purpose have been instituted or are pending or threatened under the Securities Act of 1933, as amended;
3. Subsequent to the respective dates as of which information is given in the Registration Statement or the Prospectus, there has not been (A) any Material Adverse Change, (B) any transaction that is material to the Company, (C) any obligation, direct or contingent, that is material to the Company, incurred by the Company, (D) any change in the capital stock or outstanding indebtedness of the Company, or (E) any loss or damage (whether or not insured) to the Properties which has been sustained or will have been sustained which could reasonably be expected to have a Material Adverse Effect; and
4. Each of Cooley LLP and Duane Morris LLP is entitled to rely on this Officers' Certificate in connection with the opinion that each firm is rendering pursuant to the Equity Distribution Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned have signed their names on this this ____ day of ____, 20__.

KEMPHARM INC.

By: _____
Name: Travis C. Mickle
Title: Chief Executive Officer

By: _____
Name: R. LaDuane Clifton
Title: Chief Financial Officer

EXHIBIT E

ISSUER FREE WRITING PROSPECTUSES

None.