UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

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

Date of Report (Date of earliest event reported): November 18, 2021



OPTINOSE, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) 001-38241

42-1771610

(Commission File No.) (I.R.S. Employer Identification No.)

1020 Stony Hill Road, Suite 300 Yardley,Pennsylvania 19067

(Address of principal executive offices and zip code)

(267) 364-3500

		nt's telephone number, including e or former address, if changed f	
	the the appropriate box below if the Form 8-K filing is intersions (see General Instruction A.2. below):	nded to simultaneously satisfy the	e filing obligation of the registrant under any of the following
	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	e 14d-2(b) under the Exchange A	Act (17 CFR 240.14d-2(b))
	Pre-commencement communications pursuant to Rule	e 13e-4(c) under the Exchange A	Act (17 CFR 240.13e-14(c))
ndic chap	ate by check mark whether the registrant is an emerging ter) or Rule 12b-2 of the Securities Exchange Act of 193	growth company as defined in F 4 (§240.12b-2 of this chapter).	Rule 405 of the Securities Act of 1933 (§230.405 of this
X	Emerging growth company		
X	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.		
Secu	rities registered pursuant to Section 12(b) of the Act:		
	Title of each class	Trading symbol(s)	Name of each exchange on which registered
	Common stock, par value \$0.001 per share	OPTN	Nasdaq Global Select Market

Item 1.01. Entry into a Material Definitive Agreement.

On November 16, 2021, OptiNose, Inc. (the "Company") entered into an underwriting agreement (the "Underwriting Agreement") with Piper Sandler & Co., as representative of the underwriters listed therein (the "Underwriters"), in connection with a previously announced public offering (the "Offering") of 28,750,000 shares of Company's common stock, \$0.001 par value per share ("Common Shares"), at a public offering price of \$1.60 per share less underwriting discounts and commissions (such 28,750,000 shares includes the exercise in full by the Underwriters of their option to purchase an additional 3,750,000 Common Shares)

The net proceeds from the Offering are expected to be \$43.2 million after deducting underwriting discounts and commissions before offering expenses. The Company intends to use the proceeds from the Offering for working capital and general corporate purposes, including the commercialization and clinical development of XHANCE, the clinical development of XHANCE for a follow-on indication for the treatment of chronic sinusitis and other potential development programs.

The Offering is being made pursuant to a prospectus supplement dated November 16, 2021 and an accompanying prospectus dated August 31, 2021, pursuant to a Registration Statement (No. 333-258707) on Form S-3, which was filed by the Company with the Securities and Exchange Commission ("SEC") on August 11, 2021 and declared effective by the SEC on August 31, 2021.

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

The foregoing summary of the Underwriting Agreement is qualified in its entirety by reference to the Underwriting Agreement attached hereto as Exhibit 1.1 and which is incorporated herein by reference. Hogan Lovells US LLP, counsel to the Company, delivered an opinion as to legality of the issuance and sale of the Shares in the Offering, a copy of which is attached hereto as Exhibit 5.1 and is incorporated herein by reference.

Item 8.01. Other Events

Changes to Board of Directors

In connection with the closing of the Offering and participation at a certain level in the Offering by entities affiliated with MVM Partners LLP ("MVM"), the Company intends to increase the size of its board of directors (the "Board") from six to eight members and, subject to the recommendation of the Nominating and Governance Committee of the Board (the "Nominating Committee") and approval by the Board, appoint two representatives of MVM to the Board to fill such vacancies. Any MVM representatives will be reasonably acceptable to the Nominating Committee and the Board and shall comply with the requirements of the charter for, and related guidelines of, the Nominating Committee.

Common Shares Outstanding

Upon the closing of the Offering, the Company had 82,199,567 Common Shares outstanding

The Company issued press releases announcing the launch, pricing and closing of the Offering on November 15, 2021, November 16, 2021 and November 18, 2021, respectively. Copies of these press releases are attached hereto as Exhibits 99.1, 99.2 and 99.3, respectively, and are each incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
1.1	<u>Underwriting Agreement, dated November 16, 2021, by and between OptiNose, Inc. and Piper Sandler & Co.</u>
5.1	Opinion of Hogan Lovells US LLP
23.1	Consent of Hogan Lovells US LLP (contained in Exhibit 5.1)
99.1	Press Release issued by OptiNose, Inc., dated November 15, 2021
99.2	Press Release issued by OptiNose, Inc., dated November 16, 2021
99.3	Press Release issued by OntiNose, Inc., dated November 18, 2021

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.

OptiNose, Inc.

By: /s/ Keith A. Goldan

Keith A. Goldan Chief Financial Officer

Date: November 18, 2021

25,000,000 Shares

OptiNose, Inc.

Common Stock

UNDERWRITING AGREEMENT

November 16, 2021

PIPER SANDLER & CO. As Representative of the Underwriters named in Schedule I hereto U.S. Bancorp Center 800 Nicollet Mall Minneapolis, Minnesota 55402

Ladies and Gentlemen:

OptiNose, Inc., a Delaware corporation (the "Company"), proposes to sell to the Underwriters named in Schedule I hereto (the "Underwriters") an aggregate of 25,000,000 shares (the "Firm Shares") of Common Stock, \$0.001 par value per share (the "Common Stock"), of the Company. The Company has also granted to the Underwriters an option to purchase up to 3,750,000 additional shares of Common Stock, on the terms and for the purposes set forth in Section 3 hereof (the "Option Shares"). The Firm Shares and any Option Shares purchased pursuant to this Underwriting Agreement (this "Agreement") are herein collectively called the "Securities."

The Company hereby confirms its agreement with respect to the sale of the Securities to the Underwriters, for whom Piper Sandler & Co. is acting as representative (the "*Representative*" or "you").

1. **Registration Statement and Prospectus**. The Company has prepared and filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-3 (File No. 333-258707) under the Securities Act of 1933, as amended (the "Securities Act" or "Act"), and the rules and regulations (the "Rules and Regulations") of the Commission thereunder, and such amendments to such registration statement as may have been required as of the date of this underwriting agreement (this "Agreement"). Such registration statement has been declared effective by the Commission. Each part of such registration statement, including the amendments, exhibits and any schedules thereto, the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act and the documents and information otherwise deemed to be a part thereof or included therein by Rule 430B under the Securities Act (the "Rule 430B Information") or otherwise pursuant to the Rules and Regulations, as of the time such registration statement became effective, is herein called the "Registration Statement."

Any registration statement filed by the Company pursuant to Rule 462(b) under the Securities Act is called the "*Rule 462(b) Registration Statement*" and, from and after the date and time of filing of the Rule 462(b) Registration Statement, the term "Registration Statement" shall include the Rule 462(b) Registration Statement.

The prospectus in the form in which it has most recently been filed with the Commission on or prior to the date of this Agreement is herein called the "Base Prospectus." Each preliminary prospectus supplement to the Base Prospectus (including the Base Prospectus as so supplemented) that describes the Securities and the offering thereof, that omitted the Rule 430B Information and that was used prior to the filing of the final prospectus supplement referred to in the following sentence is herein called a "Preliminary Prospectus." Promptly after execution and delivery of this Agreement, the Company will prepare and file with the Commission a final prospectus supplement to the Base Prospectus relating to the Securities and the offering thereof in accordance with the provisions of Rule 430B and Rule 424(b) of the Rules and Regulations. Such final prospectus supplement (including the Base Prospectus as so supplemented), in the form filed with the Commission pursuant to Rule 424(b) is herein called the "Prospectus." "Time of Sale Prospectus" means the Preliminary Prospectus dated November 15, 2021, any free writing prospectus set forth on Schedule II and the information on Schedule III, all considered together. Any reference herein to the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to refer to include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act as of the date of such prospectus. As used herein, the "Applicable Time" is 8:00 a.m. (New York City time) on November 16, 2021. As used herein, "Section 5(d) Written Communication" means each written communication (within the meaning of Rule 405 under the Securities Act) that is made in reliance on Section 5(d) of the Securities Act by the Company or any person authorized to act on behalf of the Company to one or more potential investors that are qualified institutional buyers ("QIBs") and/or institutions that are accredited investors ("IAIs"), as such terms are respectively defined in Rule 144A and Rule 501(a) under the Securities Act, to determine whether such investors might have an interest in the offering of the Securities; "Section 5(d) Oral Communication" means each oral communication, if any, made in reliance on Section 5(d) of the Securities Act by the Company or any person authorized to act on behalf of the Company made to one or more QIBs and/or one or more IAIs to determine whether such investors might have an interest in the offering of the Securities; "Marketing Materials" means any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Securities, including any roadshow or investor presentations made to investors by the Company (whether in person or electronically); and "Permitted Section 5(d) Communication" means the Section 5(d) Written Communication(s) and Marketing Materials listed on Schedule V attached hereto.

Each preliminary prospectus and the Prospectus when filed complied in all material respects with the Securities Act and, if filed by electronic transmission pursuant to EDGAR, was identical (except as may be permitted by Regulation S-T under the Securities Act) to the copy thereof delivered to the Underwriters for use in connection with the offer and sale of the Securities. Each of the Registration Statement and any post-effective amendment thereto, at the time it became or becomes effective, complied and will comply in all material respects with the Securities Act and did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the Applicable Time, the Time of Sale Prospectus (including any preliminary

prospectus wrapper) did not, and at the First Closing Date (as defined in Section 3) and at the Second Closing Date, as then amended or supplemented by the Company, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading. The Prospectus (including any Prospectus wrapper), as of its date, did not, and at the First Closing Date and at the Second Closing Date, will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the three immediately preceding sentences do not apply to statements in or omissions from the Registration Statement or any post-effective amendment thereto, or the Prospectus or the Time of Sale Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with written information relating to any Underwriter furnished to the Company in writing by the Representative expressly for use therein, it being understood and agreed that the only such information consists of the information described in Section 6(e) below. There are no contracts or other documents required to be described in the Time of Sale Prospectus or the Prospectus or to be filed as an exhibit to the Registration Statement which have not been described or filed as required.

For purposes of this Agreement, all references to the Registration Statement, the Rule 462(b) Registration Statement, the Base Prospectus, any Preliminary Prospectus, 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 its Electronic Data Gathering, Analysis and Retrieval System or any successor system thereto ("*EDGAR*"). All references in this Agreement to financial statements and schedules and other information which is "described," "contained," "included" or "stated" in the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus (or other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information which is incorporated by reference in or otherwise deemed by the Rules and Regulations to be a part of or included in the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus, as the case may be; and all references in this Agreement to amendments or supplements to the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to mean and include the subsequent filing of any document under the Securities Exchange Act of 1934, as amended (the "*Exchange Act*") and which is deemed to be incorporated therein by reference therein or otherwise deemed by the Rules and Regulations to be a part thereof.

1. Representations and Warranties.

The Company hereby represents, warrants and covenants to each Underwriter, as of the date of this Agreement, as of the First Closing Date (as hereinafter defined) and as of the Second Closing Date (as defined in Section 3), if any, as follows:

i. <u>Compliance with Registration Requirements</u>. The Registration Statement has become effective under the Securities Act. The Company has complied, to the Commission's satisfaction with all requests of the Commission for additional or supplemental information, if any. No stop order suspending the effectiveness of the Registration Statement is in

effect and no proceedings for such purpose have been instituted or are pending or, to the knowledge of the Company, are contemplated or threatened by the Commission. At the time the Company's Annual Report on Form 10-K for the year ended December 31, 2020 (the "Annual Report") was filed with the Commission, or, if later, at the time the Registration Statement was originally filed with the Commission, the Company met the then-applicable requirements for use of Form S-3 under the Securities Act. The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, at the time they were or hereafter are filed with the Commission, or became effective under the Exchange Act, as the case may be, complied and will comply in all material respects with the requirements of the Exchange Act.

i. Free Writing Prospectuses; Road Show, As of the determination date referenced in Rule 164(h) under the Securities Act, the Company was not, is not or will not be (as applicable) an "ineligible issuer" in connection with the offering of the Securities pursuant to Rules 164, 405 and 433 under the Securities Act. Each free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of Rule 433 under the Securities Act, including timely filing with the Commission or retention where required and legending, and each such free writing prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Securities did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, the Prospectus or any preliminary prospectus and not superseded or modified. The representations and warranties set forth in the immediately preceding sentence do not apply to statements made in reliance upon and in conformity with information relating to any Underwriters furnished to the Company in writing by the Representative expressly for use therein, it being understood and agreed that the only such information consists of the information described in Section 6(e) below. Except for the free writing prospectuses, if any, identified in Schedule II, and electronic road shows, if any, furnished to the Representative before first use, the Company has not prepared, used or referred to, and will not, without the Representative's prior written consent, which consent shall not be unreasonably withheld, prepare, use or refer to, any free writing prospectus. Each Road Show, when considered together with the Time of Sale Prospectus, did not, as of the Applicable Time, contain any untrue statement of a material fact or omit to state a

material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

- i. <u>Distribution of Offering Material by the Company</u>. Prior to the later of (i) the expiration or termination of the option granted to the Underwriters in Section 2, and (ii) the completion of the Underwriters' distribution of the Securities, the Company has not distributed and will not distribute any offering material in connection with the offering and sale of the Securities other than the Registration Statement, the Time of Sale Prospectus, the Prospectus, the free writing prospectuses, if any, identified on Schedule II hereto or any free writing prospectus reviewed and consented to by the Representative, which consent shall not be unreasonably withheld, and any Permitted Section 5(d) Communications.
- i. <u>The Underwriting Agreement</u>. This Agreement has been duly authorized, executed and delivered by the Company.
- i. <u>Authorization of the Securities</u>. The Securities to be issued by the Company in connection with the transactions contemplated by this Agreement have been 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 validly issued, fully paid and nonassessable, and the issuance and sale of such Securities is not subject to any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase such Securities.
- i. <u>No Applicable Registration or Other Similar Rights</u>. There are no persons with registration or other similar rights to have any equity or debt securities registered for sale under the Registration Statement or included in the offering contemplated by this Agreement, except for such rights as have been duly satisfied or waived.
- i. <u>No Material Adverse Effect</u>. Except as otherwise disclosed or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, subsequent to the respective dates as of which information is given in the Registration Statement, the Time of Sale Prospectus and the Prospectus: (i) there has been no Material Adverse Effect (as defined below) or any development that would reasonably be expected to result in a Material Adverse Effect; (ii) the Company and its subsidiaries, considered as one entity, have not incurred any material liability or obligation, indirect, direct or contingent, including without limitation any losses or interference with their business from fire, explosion, flood, earthquakes, accident or other calamity, whether or not covered by insurance, or from any strike, labor dispute or court or governmental action, order or decree, that are material, individually or in the aggregate, to the Company and its subsidiaries, considered as one

entity, and have not entered into any transactions not in the ordinary course of business; and (iii) there has not been any material decrease in the capital stock or any material increase in any short-term or long-term indebtedness of the Company or its subsidiaries and there has been no dividend or distribution of any kind declared, paid or made by the Company or any repurchase or redemption by the Company or any of its subsidiaries of any class of capital stock.

- i. <u>Independent Accountants</u>. To the knowledge of the Company, Ernst & Young LLP, which has expressed its opinion with respect to the financial statements (which term as used in this Agreement includes the related notes thereto) filed with the Commission as a part of the Registration Statement, the Time of Sale Prospectus and the Prospectus, is (i) an independent registered public accounting firm as required by the Securities Act, the Exchange Act and the rules of the Public Company Accounting Oversight Board ("**PCAOB**"), (ii) in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X under the Securities Act and (iii) a registered public accounting firm as defined by the PCAOB whose registration has not been suspended or revoked and who has not requested such registration to be withdrawn.
- Financial Statements. The financial statements filed with the Commission as a part of, or incorporated by reference into, the Registration Statement, the Time of Sale Prospectus and the Prospectus present fairly, in all material respects, the consolidated financial position of the Company and its subsidiaries as of the dates indicated and the results of their operations, changes in stockholders' equity and cash flows for the periods specified. Such financial statements have been prepared in conformity with generally accepted accounting principles as applied in the United States on a consistent basis throughout the periods involved, except as may be expressly stated in the related notes thereto. No other financial statements or supporting schedules are required to be included in the Registration Statement, the Time of Sale Prospectus or the Prospectus. The interactive data in eXtensible Business Reporting Language incorporated by reference into the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto. All disclosures contained or incorporated by reference in the Registration Statement, any preliminary prospectus or the Prospectus and any free writing prospectus, that constitute non-GAAP financial measures (as defined by the rules and regulations under the Securities Act and the Exchange Act) comply, in all material respects, with Regulation G under the Exchange Act and Item 10 of Regulation S-K under the Securities Act, as applicable. To the Company's knowledge, no person who has been suspended or barred from being associated with a registered public

accounting firm, or who has failed to comply with any sanction pursuant to Rule 5300 promulgated by the PCAOB, has participated in or otherwise aided the preparation of, or audited, the financial statements, supporting schedules or other financial data filed with the Commission as a part of the Registration Statement, the Time of Sale Prospectus and the Prospectus.

- i. <u>Company's Accounting System</u>. The Company and each of its subsidiaries make and keep books and records that are accurate in all material respects and maintain a system of internal accounting controls designed to, and which the Company believes is sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles as applied in the United States 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 included or incorporated by reference into the Registration Statement, the Time of Sale Prospectus and the Prospectus fairly presents the information called for in all material respects and is prepared in accordance with the Commission's rules and guidelines applicable thereto.
- i. Disclosure Controls and Procedures; Deficiencies in or Changes to Internal Control Over Financial Reporting. The Company has established and maintains disclosure controls and procedures (as defined in Rules 13a-15 and 15d-15 under the Exchange Act), which (i) are designed to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to the Company's principal executive officer and its principal financial officer by others within those entities, particularly during the periods in which the periodic reports required under the Exchange Act are being prepared; (ii) have been evaluated by management of the Company for effectiveness as of the end of the Company's most recent fiscal quarter; and (iii) are effective in all material respects to perform the functions for which they were established. Since the end of the Company's most recent audited fiscal year, there have been no significant deficiencies or material weakness in the Company's internal control over financial reporting (whether or not remediated) and there has been 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 that has occurred during its most recent fiscal quarter that has

materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

- i. <u>Incorporation and Good Standing of the Company</u>. The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware and has the corporate power and authority to own, lease and operate its properties and to conduct its business as described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus and to enter into and perform its obligations under this Agreement. The Company is duly qualified as a foreign corporation to transact business and is in good standing in the Commonwealth of Pennsylvania and each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to be so qualified or in good standing would not reasonably be expected, individually or in the aggregate, to have a material adverse effect on the condition (financial or other), earnings, business, properties, operations, assets, liabilities or prospects of the Company and its subsidiaries, considered as one entity (a "Material Adverse Effect").
- Subsidiaries. Each of the Company's "subsidiaries" (for purposes of this Agreement, as defined in Rule 405 under the Securities Act) has been duly incorporated or organized and is validly existing as a corporation or other entity in good standing under the laws of the jurisdiction of its incorporation or organization and has the power and authority (corporate or other) to own, lease and operate its properties and to conduct its business as described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus. Each of the Company's subsidiaries is duly qualified as a foreign corporation, partnership or limited liability company, as applicable, to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to be so qualified or to be in good standing would not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect. All of the issued and outstanding capital stock or other equity or ownership interests of each of the Company's subsidiaries have been duly authorized and validly issued, are fully paid and nonassessable and are owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance or adverse claim. None of the outstanding capital stock in any subsidiary was issued in violation of preemptive or similar rights of any securityholder of such subsidiary. The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed in Exhibit 21 to the Annual Report. OptiNose UK Ltd. is not a "significant subsidiary" (as defined in Rule 405 under the Securities Act).

- <u>Capitalization and Other Capital Stock Matters</u>. The authorized, issued and outstanding capital stock of the Company is as set forth in the Company's latest financial statements, audited or unaudited, as applicable, incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus (other than for subsequent issuances, if any, pursuant to employee benefit plans, or upon the exercise of outstanding options or warrants, in each case, as described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus). The Common Stock (including the Securities, when issued pursuant to the terms of this Agreement) conforms in all material respects to the description thereof contained in the Time of Sale Prospectus. All of the issued and outstanding Common Stock has been duly authorized and validly issued, are fully paid and nonassessable and have been issued in compliance with all applicable federal and state securities laws. None of the outstanding 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. There are no authorized or outstanding 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 or any of its subsidiaries other than those described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus. The descriptions of the Company's stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, set forth or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and 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.
- i. <u>Stock Exchange Listing</u>. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and is listed on the Nasdaq Global Select Market ("*Nasdaq*"), and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from Nasdaq, nor has the Company received any notification that the Commission or Nasdaq is contemplating terminating such registration or listing. To the Company's knowledge, it is in compliance with all applicable listing requirements of Nasdaq.
- i. <u>Non-Contravention of Existing Instruments; No Further Authorizations or Approvals Required</u>. Neither the Company nor any of its subsidiaries is in violation of its charter or bylaws, or similar organizational documents, as applicable, or is in default (or, with the giving of notice or lapse of time, would be in default) ("**Default**") under any indenture, loan, credit

agreement, note, lease, license agreement, contract, franchise or other instrument (including, without limitation, any pledge agreement, security agreement, mortgage or other instrument or agreement evidencing, guaranteeing, securing or relating to indebtedness) to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound, or to which any of their respective properties or assets are subject (each, an "Existing Instrument"), except for such Defaults in Existing Instruments as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. The Company's execution, delivery and performance of this Agreement, consummation of the transactions contemplated hereby and by the Registration Statement, the Time of Sale Prospectus and the Prospectus and the issuance and sale of the Securities (including the use of proceeds from the sale of the Securities as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus under the caption "Use of Proceeds") (i) have been duly authorized by all necessary corporate action and will not result in any violation of the provisions of the charter or bylaws, partnership agreement or operating agreement or similar organizational documents, as applicable, of the Company or any subsidiary, (ii) will not conflict with or constitute a breach of, or Default or a Debt Repayment Triggering Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, or require the consent of any other party to, any Existing Instrument and (iii) will not result in any violation of any law, administrative regulation or administrative or court decree applicable to the Company or any of its subsidiaries, except, in the case of clauses (ii) and (iii) above, as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. No consent, approval, authorization or other order of, or registration or filing with, any court or other governmental or regulatory authority or agency, is required for the Company's execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby and by the Registration Statement, the Time of Sale Prospectus and the Prospectus, except such as have been obtained or made by the Company and are in full force and effect under the Securities Act and such as may be required under applicable state securities or blue sky laws or the Financial Industry Regulatory Authority, Inc. ("FINRA"). As used herein, a "Debt Repayment Triggering Event" means any event or condition which 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 or any of its subsidiaries.

ii. <u>Compliance with Laws</u>. The Company and its subsidiaries have been and are in compliance with all applicable laws, rules and regulations, except where failure to be so in compliance would not reasonably be

- expected, individually or in the aggregate, to have a Material Adverse Effect.
- iii. <u>No Material Actions or Proceedings</u>. There is no action, suit, proceeding, inquiry or investigation brought by or before any governmental entity now pending or, to the knowledge of the Company, threatened, against or affecting the Company or any of its subsidiaries, which would reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect or materially and adversely affect the consummation of the transactions contemplated by this Agreement or the performance by the Company of its obligations hereunder; and the aggregate of all pending legal or governmental proceedings to which the Company or any such subsidiary is a party or of which any of their respective properties or assets is the subject, including ordinary routine litigation incidental to the business, if determined adversely to the Company, would not reasonably be expected to have a Material Adverse Effect. No material labor dispute with the employees of the Company or any of its subsidiaries, or with the employees of any principal supplier, manufacturer, or contractor of the Company, exists or, to the knowledge of the Company, is threatened or imminent.
- iv. Intellectual Property Rights. The Company and its subsidiaries own, or have obtained valid and enforceable licenses for, the inventions, patent applications, patents, trademarks, trade names, service names, copyrights, trade secrets and other intellectual property described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus as being owned or licensed by them or which, to the Company's knowledge, are necessary for the conduct of their respective businesses as currently conducted or as currently proposed to be conducted in the Registration Statement, the Time of Sale Prospectus and the Prospectus (collectively, "Intellectual Property"). To the Company's knowledge: (i) there are no third parties who have rights to any Intellectual Property, except (A) for a security interest in favor of BPCR Limited Partnership, (B) the licenses of Intellectual Property to Inexia Limited and Currax Pharmaceuticals LLC disclosed or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, and (C) for customary reversionary rights of third-party licensors with respect to Intellectual Property that is disclosed or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus as licensed to the Company or one or more of its subsidiaries, and the Company and its subsidiaries have taken all reasonable steps necessary to secure their interests in the Intellectual Property from their employees and contractors; (ii) there is no infringement by third parties of any Intellectual Property; (iii) the Company is not infringing the intellectual property rights of third parties; (iv) the Company is the sole owner of the Intellectual Property owned by it, except for a security interest in favor of BPCR Limited Partnership, and has the valid right to use the Intellectual Property; (v) there are no material

defects in any of the patents or patent applications included in the Intellectual Property; (vi) the duties of candor and good faith required by the United States Patent and Trademark Office during the prosecution of the United States patents and patent applications included in the Intellectual Property have been complied with, and all such requirements in foreign offices having similar requirements applicable to the Company and its subsidiaries have been complied with; and (vii) no employee of the Company is in or has been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company. There is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others, that would reasonably be expected to have a Material Adverse Effect on the Company: (A) challenging the Company's rights in or to any Intellectual Property; (B) challenging the validity, enforceability or scope of any Intellectual Property; or (C) asserting that the Company or any of its subsidiaries infringes or otherwise violates, or would, upon the commercialization of any product or service described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus as under development, infringe, misappropriate or violate, any patent, trademark, trade name, service name, copyright, trade secret or other proprietary rights of others. The Company and its subsidiaries have complied in all material respects with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company or any subsidiary, and all such agreements are in full force and effect. The product candidates described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus as under development by the Company or any subsidiary fall within the scope of the claims of one or more patents or patent applications owned by, or exclusively licensed to, the Company or any subsidiary.

- V. <u>All Necessary Permits, etc</u>. The Company and its subsidiaries possess such valid and current certificates, authorizations or permits required by state, federal or foreign regulatory agencies or bodies to conduct their respective businesses as currently conducted and as described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus ("Permits"). Neither the Company nor any of its subsidiaries is in violation of, or in default under, any of the Permits or has received any notice of proceedings relating to the revocation or modification of, or non-compliance with, any such Permit.
- i. <u>Title to Properties</u>. Neither the Company nor any Subsidiary owns any real property. The Company and its subsidiaries have good and marketable title to all of the personal property and other assets reflected as owned in the financial statements referred to in Section 2(ix) above (or

elsewhere in the Registration Statement, the Time of Sale Prospectus or the Prospectus), in each case free and clear of any security interests, mortgages, liens, encumbrances, equities, adverse claims and other defects, except for a security interest in favor of BPCR Limited Partnership, and except as would not reasonably be expected, individually or in the aggregate, to materially affect the value of such property or materially interfere with the use thereof. The real property, improvements, equipment and personal property held under lease by the Company or any of its subsidiaries are held under valid and enforceable leases, with such exceptions as are not material and do not materially interfere with the use made or proposed to be made of such real property, improvements, equipment or personal property by the Company or such subsidiary.

- i. <u>Tax Law Compliance</u>. The Company and its subsidiaries have filed all necessary federal, state and foreign income and franchise tax returns or have properly requested extensions thereof and have paid all taxes required to be paid by any of them and, if due and payable, any related or similar assessment, fine or penalty levied against any of them except as may be being contested in good faith and by appropriate proceedings. The Company has made adequate charges, accruals and reserves in the applicable financial statements referred to in Section 2(ix) above in respect of all federal, state and foreign income and franchise taxes for all periods as to which the tax liability of the Company or any of its subsidiaries has not been finally determined.
- i. <u>Insurance</u>. Each of the Company and its subsidiaries are insured by recognized, financially sound and reputable institutions with policies in such amounts and with such deductibles and covering such risks as the Company reasonably believes are generally deemed adequate and customary for their businesses including, but not limited to, policies covering real and personal property owned or leased by the Company and its subsidiaries against theft, damage, destruction, acts of vandalism and earthquakes and policies covering the Company and its subsidiaries for product liability claims and clinical trial liability claims The Company has no reason to believe that it or any of its subsidiaries will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not reasonably be expected to have a Material Adverse Effect. Neither the Company nor any of its subsidiaries has been denied any insurance coverage which it has sought or for which it has applied.
- i. <u>Compliance with Environmental Laws</u>. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect: (i) neither the Company nor any of its subsidiaries is in violation of any federal, state, local or foreign statute, law, rule, regulation,

ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"); (ii) the Company and its subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance in all material respects with their requirements; (iii) there are no pending or, to the knowledge of the Company, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company or any of its subsidiaries; and (iv) there are no orders for clean-up or remediation, or an action, suit or proceeding pending or, to the knowledge of the Company threatened, by any private party or governmental body or agency, against or affecting the Company or any of its subsidiaries relating to Hazardous Materials or any Environmental Laws.

i. *ERISA Compliance*. The Company and its subsidiaries and any "employee benefit plan" (as defined under the Employee Retirement Income Security Act of 1974, as amended, and the regulations and published interpretations thereunder (collectively, "*ERISA*")) established or maintained by the Company, its subsidiaries or, to the knowledge of the Company, their "ERISA Affiliates" (as defined below) are in compliance in all material respects with ERISA. "ERISA Affiliate" means, with respect to the Company or any of its subsidiaries, any member of any group of organizations described in Sections 414(b), (c), (m) or (o) of the Internal Revenue Code of 1986, as amended, and the regulations and published interpretations thereunder (the "*Code*") of which the Company or such subsidiary is a member. No "reportable event" (as defined under ERISA) has occurred or is reasonably expected to occur with respect to any "employee benefit plan" established or maintained by the Company, its subsidiaries or any of their ERISA Affiliates. No "employee benefit plan" established or maintained by the Company, its subsidiaries or any of their ERISA Affiliates, if such "employee benefit plan" were terminated, would have any "amount of unfunded benefit liabilities" (as defined under ERISA). Neither the Company, its subsidiaries nor any of their ERISA Affiliates has incurred or reasonably expects to incur any material liability under (i) Title IV of ERISA with respect to termination of, or withdrawal

from, any "employee benefit plan" or (ii) Sections 412, 4971, 4975 or 4980B of the Code. Each employee benefit plan established or maintained by the Company, its subsidiaries or any of their ERISA Affiliates that is intended to be qualified under Section 401(a) of the Code is so qualified and nothing has occurred, whether by action or failure to act, which would reasonably be expected to cause the loss of such qualification.

- i. <u>Company Not an "Investment Company."</u> The Company is not, and will not be, either after receipt of payment for the Securities or after the application of the proceeds therefrom as described under "Use of Proceeds" in the Registration Statement, the Time of Sale Prospectus or the Prospectus, required to register as an "investment company" under the Investment Company Act of 1940, as amended (the "Investment Company Act").
- i. <u>No Price Stabilization or Manipulation; Compliance with Regulation M</u>. Neither the Company nor any of its subsidiaries has taken, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in stabilization or manipulation of the price of the Common Stock or of any "reference security" (as defined in Rule 100 of Regulation M under the Exchange Act ("**Regulation M**")) with respect to the Common Stock, whether to facilitate the sale or resale of the Securities or otherwise, and has taken no action which would directly or indirectly violate Regulation M.
- i. <u>Related-Party Transactions</u>. There are no business relationships or related-party transactions involving the Company or any of its subsidiaries or any other person required under Item 404 of Regulation S-K to be described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus that have not been described as required.
- i. <u>FINRA Matters</u>. All of the information provided to the Underwriters or to counsel for the Underwriters by the Company, its counsel, its officers and directors and, to the knowledge of the Company, the holders of any securities (debt or equity) or options to acquire any securities of the Company in connection with the offering of the Securities is true, complete, correct and compliant with FINRA's rules and any letters, filings or other supplemental information provided to FINRA pursuant to FINRA Rules or NASD Conduct Rules is true, complete and correct.
- i. <u>Parties to Lock-Up Agreements</u>. The Company has furnished to the Underwriters a letter agreement in the form attached hereto as Exhibit A (the "**Lock-up Agreement**") from each individual listed on Schedule IV. If any additional persons shall become directors or officers (as defined in Rule 16a-1(f) under the Exchange Act) of the Company prior to the end of

the Company Lock-up Period (as defined below), the Company shall cause each such person, prior to or contemporaneously with their appointment or election as a director or officer of the Company, to execute and deliver to the Representative a Lock-up Agreement; provided, however, that the Company shall not be required to cause any persons that become directors of the Company in connection with the offering of Securities contemplated by this Agreement to execute or deliver any Lock-up Agreement.

- i. <u>Statistical and Market-Related Data</u>. All statistical, demographic and market-related data included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate in all material respects. To the extent required, the Company has obtained the written consent to the use of such data from such sources.
- i. <u>No Unlawful Contributions or Other Payments</u>. Neither the Company nor any of its subsidiaries nor, to the Company's knowledge, any employee or agent of the Company or any subsidiary, has made any contribution or other payment to any official of, or candidate for, any federal, state or foreign office in violation of any applicable law or of the character required to be disclosed in the Registration Statement, the Time of Sale Prospectus or the Prospectus.
- i. Anti-Corruption Laws. None of the Company, any of its subsidiaries or any of their respective affiliates, directors or officers, employees or, to the Company's knowledge, any of the Company or its subsidiaries' respective agents, representatives or other persons associated with or acting on behalf of the Company or any of its subsidiaries or their respective affiliates has, in the course of its actions for, or on behalf of, the Company or any of its subsidiaries (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; (ii) made or taken an act in furtherance of an offer, promise or authorization of any direct or indirect unlawful payment or benefit to any domestic government official, "foreign official" (as defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (collectively, the "FCPA")) or government employee, including of any government-owned or controlled entity or a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office; (iii) violated or is in violation of any provision of the FCPA 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 non-U.S. anti-bribery or anti-corruption laws; or (iv) made, offered, agreed, requested or taken an act in furtherance of any unlawful or improper bribe, rebate, payoff, influence payment, kickback or other unlawful payment or benefit; and the Company and its subsidiaries and, to the Company's knowledge, its affiliates have conducted their respective businesses in compliance with applicable anti-bribery and anti-corruption laws and have instituted and maintain and continue to maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance with such laws and with the representation and warranty contained herein.

- i. <u>Money Laundering Laws</u>. The operations of the Company and its subsidiaries are, and have been conducted at all times, in compliance with applicable financial recordkeeping and reporting requirements, including those of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar applicable rules, regulations or guidelines, issued, administered or enforced by any governmental agency (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 or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.
- Sanctions Laws. Neither the Company nor its subsidiaries, or any of their respective directors, officers or employees or, to the knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company or its subsidiaries is currently subject to or the target of any U.S. sanctions administered by the U.S. Government (including, without limitation, the Office of Foreign Assets Control 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 (collectively, "Sanctions"), nor is the Company or its subsidiaries located, organized or resident in a country or territory that is subject to or the target of Sanctions, including, without limitation, Crimea, Cuba, Iran, North Korea and Syria (each, a "Sanctioned Country"); and the Company and its subsidiaries will not directly or indirectly use the proceeds of this offering, or lend, contribute or otherwise make available such proceeds to any joint venture partner or other person or entity, for the purpose of (i) financing or facilitating the activities of or business with any person that currently is subject to or the target of any Sanctions, (ii) financing or facilitating any activities of or business in any Sanctioned Country or (iii) financing or using such proceeds in any other manner that will result in a violation by any person (including any person participating

in the transaction whether as underwriter, advisor, investor or otherwise) of Sanctions. For the past five years, each of the Company and its subsidiaries has not engaged in, is not now engaged in, and will not engage in, any dealings or transactions with any person that at the time of the dealing or transaction is or was subject to or the target of Sanctions or with any Sanctioned Country.

- i. <u>Brokers</u>. Except pursuant to this Agreement, there is no broker, finder or other party that is entitled to receive from the Company or its subsidiaries any brokerage or finder's fee or other fee or commission as a result of any transactions contemplated by this Agreement.
- i. <u>Forward-Looking Statements</u>. Each financial or operational projection or other "forward-looking statement" (as defined by Section 27A of the Securities Act or Section 21E of the Exchange Act) contained or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus (i) was so included by the Company in good faith and with reasonable basis after due consideration by the Company of the underlying assumptions, estimates and other applicable facts and circumstances and (ii) is accompanied by meaningful cautionary statements identifying those factors that could cause actual results to differ materially from those in such forward-looking statement. No such statement was made with the knowledge of an executive officer or director of the Company that it was false or misleading.
- i. <u>No Outstanding Loans or Other Extensions of Credit</u>. The Company does not have any outstanding extension of credit, in the form of a personal loan, to or for any director or executive officer (or equivalent thereof) of the Company except for such extensions of credit as are expressly permitted by Section 13(k) of the Exchange Act.
- i. <u>Emerging Growth Company Status</u>. The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "*Emerging Growth Company*")
- i. *Communications*. The Company (i) has not alone engaged in communications with potential investors in reliance on Section 5(d) of the Securities Act other than Permitted Section 5(d) Communications with the consent of the Representative with entities that are QIBs or IAIs and (ii) has not authorized anyone other than the Representative to engage in such communications; the Company reconfirms that the Representative has been authorized to act on its behalf in undertaking Marketing Materials, Section 5(d) Oral Communications and Section 5(d) Written Communications; as of the Applicable Time, each Permitted Section 5(d) Communication, when considered together with the Time of Sale Prospectus, did not, as of the Applicable Time, include an untrue

- statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and each Permitted Section 5(d) Communication, if any, does not, as of the date hereof, conflict with the information contained or incorporated by reference in the Registration Statement, the Preliminary Prospectus and the Prospectus.
- ii. Clinical Data and Regulatory Compliance. The preclinical tests and clinical trials, and other studies (collectively, "studies") that are described in, or the results of which are referred to in, the Registration Statement, the Time of Sale Prospectus or the Prospectus were and, if still pending, are being conducted in all material respects in accordance with the protocols, procedures and controls designed and approved for such studies and with standard medical and scientific research procedures; each description of the results of such studies is accurate and complete in all material respects and fairly presents the data derived from such studies, and the Company and its subsidiaries have no knowledge of any other studies the results of which are inconsistent with, or otherwise call into question, the results described or referred to or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus; the Company and its subsidiaries have made all such filings and obtained all such approvals as may be required by the Food and Drug Administration of the U.S. Department of Health and Human Services or any committee thereof or from any other U.S. or foreign government or drug or medical device regulatory agency, or health care facility Institutional Review Board (collectively, the "Regulatory Agencies"), except where such failure or non-compliance would not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect; neither the Company nor any of its subsidiaries has received any notice of, or correspondence from, any Regulatory Agency requiring the termination, suspension or modification of any clinical trials that are described or referred to or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus; and the Company and its subsidiaries have each operated and currently are in compliance in all material respects with all applicable rules, regulations and policies of the Regulatory Agencies.
- i. <u>Compliance with Health Care Laws</u>. The Company and its subsidiaries are, and at all times have been, in compliance with all Health Care Laws, except where failure to be so in compliance would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. For purposes of this Agreement, "Health Care Laws" means: (i) the Federal Food, Drug, and Cosmetic Act (21 U.S.C. Section 301 et seq.) and the regulations promulgated thereunder; (ii) all applicable federal, state, local and foreign health care related fraud and abuse laws, including, without limitation, the U.S. Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the Civil Monetary Penalties Laws (42 U.S.C. Section 1320a-7a), the U.S. Civil False Claims Act (31 U.S.C. Section 3729 et

seq.), all applicable federal, state, local and foreign criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. Sections 286 and 287, and the health care fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 ("HIPAA") (42 U.S.C. Section 1320d et seq.), the exclusion laws (42 U.S.C. Section 1320a-7), the statutes, regulations and directives of applicable government funded or sponsored healthcare programs, and the regulations promulgated pursuant to such statutes; (iii) the Physician Payments Sunshine Act (42 U.S.C. Section 1320-7h); (iv) HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), and the data privacy and security regulations promulgated thereunder; (v) the Patient Protection and Affordable Care Act of 2010 (Pub. Law 111-148), as amended by the Health Care and Education Affordability Reconciliation Act of 2010 (Pub. Law 111-152), the regulations promulgated thereunder; (vi) the U.S. Controlled Substances Act (21 U.S.C. Section 801 et seq.); (vii) quality, safety and accreditation requirements under applicable federal, state, local or foreign laws or regulatory bodies, including, but not limited to, all laws applicable to ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, advertising, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured or distributed by the Company; and (viii) all other local, state, federal, national, supranational and foreign laws, relating to the regulation of the Company or its subsidiaries. Neither the Company nor its subsidiaries have received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory authority or third party alleging that any product operation or activity is in violation of any Health Care Laws nor, to the Company's knowledge, is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action threatened. Except as would not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect, the Company and its subsidiaries have filed, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws, and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and accurate on the date filed in all material respects (or were corrected or supplemented by a subsequent submission). Neither the Company nor its subsidiaries are a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority. Additionally, neither the Company, its subsidiaries nor any of their respective employees, officers or directors has been excluded, suspended or debarred from participation in any U.S. federal health care program or human

clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that would reasonably be expected to result in debarment, suspension, or exclusion.

- i. <u>Compliance with Data Privacy Laws</u>. To the Company's knowledge, the Company and its subsidiaries are, and at all prior times were, in material compliance with all applicable state and federal data privacy and security laws and regulations (collectively, the "Privacy Laws"), except where failure to be so in compliance would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, Except where failure to do so would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Company and its subsidiaries have in place, comply with, and take commercially reasonable steps reasonably designed to comply in all material respects with their policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling, and analysis of Personal Data (as defined below) (the "Policies"). Except where failure to do so would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Company and its subsidiaries have at all times made all disclosures to users or customers required by the Privacy Laws, and none of such disclosures made or contained in any Policy have, to the knowledge of the Company, been materially inaccurate or in violation of any Privacy Laws in any material respect. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Company further certifies that neither it nor any subsidiary: (i) has received written notice of any actual or potential liability under or relating to, or actual or potential violation of, any of the Privacy Laws, (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation, or other corrective action pursuant to any Privacy Law; or (iii) is a party to any order, decree, or agreement from or with a governmental or regulatory authority or agency that imposes any obligation or liability under any Privacy Law.
- i. <u>Cybersecurity</u>. Except where failure to do so would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, to the Company's knowledge, the Company and its subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "IT Systems") are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company and its subsidiaries as currently conducted, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. Except where failure to do so would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Company and its subsidiaries have

implemented and maintained commercially reasonable physical, technical and administrative controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data, including "Personal Data," used in connection with their businesses. "Personal Data" means (i) a natural person's name, street address, telephone number, e-mail address, photograph, social security number or tax identification number, driver's license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as "personally identifying information" under the Federal Trade Commission Act, as amended; (iii) if applicable to the Company, "personal data" as defined by EU General Data Protection Regulation ("GDPR"); (iv) if applicable to the Company, any information which would qualify as "protected health information" under HIPAA; and (v) any other piece of information that allows the identification of such natural person, or his or her family, or permits the collection or analysis of any data related to an identified person's health or sexual orientation. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, to the Company's knowledge, there have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person, nor any incidents under internal review or investigations relating to the same. The Company and its subsidiaries are presently in material 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 Personal Data and to the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification, except where the failure to be in compliance would not reasonably be expected to have a Material Adverse Effect.

- i. <u>No Contract Terminations</u>. Neither the Company nor any of its subsidiaries has sent or received any communication regarding termination of, or intent not to renew, any of the contracts or agreements referred to or described in any preliminary prospectus, the Prospectus or any free writing prospectus, or referred to or described in, or filed as an exhibit to, the Registration Statement, and no such termination or non-renewal has been threatened by the Company or any of its subsidiaries or, to the Company's knowledge, any other party to any such contract or agreement, which threat of termination or non-renewal has not been rescinded as of the date hereof.
- i. <u>Dividend Restrictions</u>. No subsidiary of the Company is prohibited or restricted, directly or indirectly, from paying dividends to the Company, or

from making any other distribution with respect to such subsidiary's equity securities or from repaying to the Company or any other subsidiary of the Company any amounts that may from time to time become due under any loans or advances to such subsidiary from the Company or from transferring any property or assets to the Company or to any other subsidiary, except, in each case, for such restrictions or prohibitions imposed under applicable laws or pursuant to the Company's note purchase agreement entered into with funds managed by Pharmakon Advisors, LP disclosed or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus.

i. <u>No Indebtedness</u>. Except as otherwise disclosed or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the Company and its subsidiaries have no outstanding indebtedness other than intercompany debt.

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

The Company has a reasonable basis for making each of the representations set forth in this Section 2. The Company acknowledges that the Underwriters and, for purposes of the opinions to be delivered pursuant to Section 5 hereof, counsel to the Company and counsel to the Underwriters, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

1. Purchase, Sale and Delivery of the Securities.

a. <u>Firm Shares</u>. On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell the Firm Shares to the Underwriters, and each Underwriter agrees, severally and not jointly, to purchase from the Company the number of Firm Shares set forth opposite the name of such Underwriter in Schedule I hereto. The purchase price for each Firm Share shall be \$1.504 per share. In making this Agreement, each Underwriter is contracting severally and not jointly; except as provided in paragraph (d) of this Section 3 and in Section 8 hereof, the agreement of each Underwriter is to purchase only the respective number of Firm Shares specified in Schedule I.

The Firm Shares will be delivered by the Company to you for the accounts of the Underwriters against payment of the purchase price therefor by wire transfer of same day funds payable to the order of the Company at the offices of Piper Sandler & Co., U.S. Bancorp Center, 800 Nicollet Mall, Minneapolis, Minnesota, or such other location as may be mutually acceptable, at 9:00 a.m. Central time on the second (or if the Securities are priced, as contemplated by Rule 15c6-1(c) under the Exchange Act, after 4:30 p.m. Eastern time, the third) full business day following the date hereof, or at such other time and date as you and the

Company determine pursuant to Rule 15c6-1(a) under the Exchange Act, such time and date of delivery being herein referred to as the "*First Closing Date*."

a. Option Shares. On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company hereby grants to the Underwriters an option to purchase all or any portion of the Option Shares at the same purchase price as the Firm Shares, for use solely in covering any over-allotments made by the Underwriters in the sale and distribution of the Firm Shares. The option granted hereunder may be exercised in whole or in part at any time (but not more than once) within 30 days after the effective date of this Agreement upon notice (confirmed in writing) by the Representative to the Company setting forth the aggregate number of Option Shares as to which the Underwriters are exercising the option, the names and denominations in which the Option Shares are to be registered and the date and time, as determined by you, when the Option Shares are to be delivered, such time and date being herein referred to as the "Second Closing" and "Second Closing Date," respectively; provided, however, that the Second Closing Date shall not be earlier than the First Closing Date nor earlier than the second business day after the date on which the option shall have been exercised. The number of Option Shares to be purchased by each Underwriter shall be the same percentage of the total number of Option Shares to be purchased by the Underwriters as the number of Firm Shares to be purchased by such Underwriter is of the total number of Firm Shares to be purchased by the Underwriters, as adjusted by the Representative in such manner as the Representative deems advisable to avoid fractional shares. No Option Shares shall be sold and delivered unless the Firm Shares previously have been, or simultaneously are, sold and delivered.

The Option Shares will be delivered by the Company to you for the accounts of the Underwriters against payment of the purchase price therefor by wire transfer of same day funds payable to the order of the Company at the offices of Piper Sandler & Co., U.S. Bancorp Center, 800 Nicollet Mall, Minneapolis, Minnesota, or such other location as may be mutually acceptable at 9:00 a.m., Central time, on the Second Closing Date.

(c) <u>Delivery</u>. If the Representative so elects, delivery of the Firm Shares or the Option Shares may be made by credit through full fast transfer to the accounts at DTC designated by the Representative. The Firm Shares or the Option Shares, as the case may be, shall be in such denominations and registered in such names as you have set forth in your notice of option exercise, or evidence of their issuance, will be made available for checking at a reasonable time preceding the First Closing Date or the Second Closing Date, as applicable, at the office of Piper Sandler & Co., 800 Nicollet Mall, Minneapolis, Minnesota, or such other location as may be mutually acceptable. In the event that the Firm Shares (and Option Shares, if elected by the Representative) are not delivered to the Representative by 2:30 p.m., New York City time, on the First Closing Date (and the Second Closing Date, if elected by the Representative), the Company will return payment of the full purchase price to the Representative's agent, Pershing LLC, via same day funds by 4:30 p.m., New York City time. The Company shall remain liable to Pershing LLC for the full amount of the purchase price and

any costs associated with recovering the purchase price until the full amount has been received by Pershing LLC.

i. <u>Purchase by Representative on Behalf of Underwriters</u>. It is understood that you, individually and not as Representative of the Underwriters, may (but shall not be obligated to) make payment to the Company, on behalf of any Underwriter, for the Securities to be purchased by such Underwriter. Any such payment by you shall not relieve any such Underwriter of any of its obligations hereunder. Nothing herein contained shall constitute any of the Underwriters an unincorporated association or partner with the Company.

1. Covenants of the Company.

The Company covenants and agrees with the Underwriters as follows:

- Required Filings. During the period beginning on the date hereof and ending on the later of the Second Closing Date or such date, as in the opinion of counsel for the Underwriters, the Prospectus is no longer required by law to be delivered (assuming the absence of Rule 172 under the Securities Act), in connection with sales by an Underwriter or dealer (the "Prospectus Delivery Period"), prior to amending or supplementing the Registration Statement (including any Rule 462(b) Registration Statement), the Time of Sale Prospectus or the Prospectus, the Company shall furnish to the Representative for review a copy of each such proposed amendment or supplement, and the Company shall not file any such proposed amendment or supplement to which the Representative or counsel to the Underwriters reasonably object. Subject to this Section 4(i), immediately following execution of this Agreement, the Company will prepare the Prospectus containing the Rule 430B Information and other selling terms of the Securities, the plan of distribution thereof and such other information as may be required by the Securities Act or the Rules and Regulations or as the Representative and the Company may deem appropriate, and if requested by the Representative, an issuer free writing prospectus containing the selling terms of the Securities and such other information as the Company and the Representative may deem appropriate, and will file or transmit for filing with the Commission, in accordance with Rule 424(b) or Rule 433, as the case may be, copies of the Prospectus and each issuer free writing prospectus.
- i. <u>Notification of Certain Commission Actions</u>. After the date of this Agreement and until completion of the Prospectus Delivery Period, the Company shall promptly advise the Representative in writing, which may be by email, of (A) the receipt of any comments of, or requests for additional or supplemental information from, the Commission relating to the Registration Statement, (B) the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or

supplement to any Preliminary Prospectus, the Time of Sale Prospectus, any free writing prospectus or the Prospectus, (C) the time and date that any post-effective amendment to the Registration Statement becomes effective, (D) the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or of any order preventing or suspending its use or the use of any Preliminary Prospectus, the Time of Sale Prospectus, the Prospectus or any issuer free writing prospectus, or (E) any proceedings to remove, suspend or terminate from listing or quotation the Common Stock from any securities exchange upon which it is listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time, the Company will use its best efforts to obtain the lifting of such order as soon as reasonably practicable. Additionally, the Company agrees that it shall comply with the applicable provisions of Rules 424(b), 430A and 430B under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under Rule 424(b), Rule 433 or Rule 462 were received in a timely manner by the Commission (without reliance on Rule 424(b)(8) or Rule 164(b)).

i. Continued Compliance with Securities Laws. (A) During the Prospectus Delivery Period, the Company will comply as far as it is able with all requirements imposed upon it by the Securities Act, as now and hereafter amended, and by the Rules and Regulations, as from time to time in force, and by the Exchange Act so far as necessary to permit the continuance of sales of or dealings in the Securities as contemplated by the provisions hereof, the Time of Sale Prospectus and the Prospectus. If during such period any event occurs as a result of which the Prospectus (or if the Prospectus is not yet available to prospective purchasers, the Time of Sale Prospectus) would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary or appropriate in the opinion of the Company or its counsel or the Representative or counsel to the Underwriters to amend the Registration Statement or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Prospectus) to comply with the Securities Act or to file under the Exchange Act any document which would be deemed to be incorporated by reference in the Prospectus in order to comply with the Securities Act or the Exchange Act, the Company promptly will (x) notify you of such untrue statement or omission, (y) amend the Registration Statement or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Prospectus) or file such document (at the expense of the Company) so as to correct such statement or omission or effect such compliance, and (z) notify you when any

amendment to the Registration Statement is filed or becomes effective or when any supplement to the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Prospectus) is filed.

- (B) If at any time following issuance of an issuer free writing prospectus there occurred or occurs an event or development as a result of which such issuer free writing prospectus conflicted or would conflict with the information contained in the Registration Statement, the Preliminary Prospectus or the Prospectus or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at that subsequent time, not misleading, the Company (x) has promptly notified or promptly will notify the Representative of such conflict, untrue statement or omission, (y) has promptly amended or will promptly amend or supplement, at its own expense, such issuer free writing prospectus to eliminate or correct such conflict, untrue statement or omission, and (z) has notified or promptly will notify you when such amendment or supplement was or is filed with the Commission to the extent required to be filed by the Rules and Regulations.
- (C) If, immediately prior to the third anniversary of the initial effective date of the Registration Statement, any of the Securities to be purchased pursuant to this Agreement remain unsold by the Underwriters, the Company will prior to that third anniversary file, if it has not already done so, a new shelf registration statement relating to the Securities, in a form satisfactory to the Representative, will use its best efforts to cause such registration statement to be declared effective within 180 days after that third anniversary, and will take all other action necessary or appropriate to permit the public offering and sale of the Securities to continue as contemplated in the expired registration statement relating to the Securities. References herein to the Registration Statement shall include such new shelf registration statement.
 - i. <u>Blue Sky Qualifications</u>. The Company shall endeavor in good faith to take or cause to be taken all reasonably necessary action to qualify the Securities for sale under the securities laws of such jurisdictions as you reasonably designate and to continue such qualifications in effect so long as required for the distribution of the Securities, except that the Company shall not be required in connection therewith to qualify as a foreign corporation (where not otherwise required) or to execute a general consent to service of process in any jurisdiction (where not otherwise required).
 - i. <u>Provision of Documents</u>. Upon written request prior to end of the Prospectus Delivery Period, the Company will furnish, at its own expense, to the Underwriters and counsel for the Underwriters copies of the Registration Statement (which will include all consents and exhibits filed therewith), and to the Underwriters and any dealer each Preliminary Prospectus, the Time of Sale Prospectus, the Prospectus, any issuer free writing prospectus, and all amendments and supplements to such documents, in each case as soon as available and in such quantities as you may from time to time reasonably request.

- i. <u>Rule 158</u>. The Company will make generally available to its security holders and to the Representative as soon as practicable, but in no event later than 15 months after the end of the Company's current fiscal quarter, an earnings statement (which need not be audited) covering a twelve-month period that shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 of the Rules and Regulations, which earnings statement shall be deemed to have been made generally available by the Company if the Company is in compliance with its reporting obligations pursuant to the Exchange Act, if such compliance satisfies the conditions of Rule 158, and if such earnings statement is made available on EDGAR.
- i. <u>Payment and Reimbursement of Expenses</u>. The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, will pay or cause to be paid (A) all expenses (including transfer taxes allocated to the respective transferees and any applicable stamp taxes incurred in connection with the delivery to the Underwriters of the Securities, (B) all expenses and fees (including, without limitation, fees and expenses of the Company's accountants and counsel but not including fees of the Underwriters' counsel or consultants) in connection with the preparation, printing, filing, delivery, and shipping of the Registration Statement (including the financial statements therein and all amendments, schedules, and exhibits thereto), the Securities, each Preliminary Prospectus, the Time of Sale Prospectus, the Prospectus, any issuer free writing prospectus and any amendment thereof or supplement thereto, and the printing, delivery, and shipping of this Agreement and other underwriting documents, (C) the fees and expenses of any transfer agent or registrar, (D) listing fees, if any, (E) the cost and expenses of the Company relating to investor presentations or any "roadshow" undertaken in connection with marketing of the Securities, and (F) all other costs and expenses of the Company incident to the performance of its obligations hereunder that are not otherwise specifically provided for herein. If this Agreement is terminated by the Representative pursuant to Section 9 hereof or if the sale of the Securities provided for herein is not consummated by reason of any failure, refusal or inability on the part of the Company to perform any agreement on its or their part to be performed, or because any other condition of the Underwriters' obligations hereunder required to be fulfilled by the Company is not fulfilled, the Company will reimburse the Underwriters for all out-of-pocket accountable disbursements (including but not limited to fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges) incurred by the Underwriters in connection with their investigation, preparing to market and marketing the Securities or in contemplation of performing their obligations hereunder.

- i. <u>Use of Proceeds</u>. The Company will apply the net proceeds from the sale of the Securities to be sold by it hereunder for the purposes set forth in the Time of Sale Prospectus and in the Prospectus.
- i. <u>Company Lock Up.</u> The Company will not, without the prior written consent of Piper Sandler & Co., from the date of execution of this Agreement and continuing to and including the date 90 days after the date of the Prospectus (the "Lock-Up Period"): (i) sell, offer to sell, contract to sell or lend any Common Stock or Related Securities (as defined below); (ii) effect any short sale, or establish or increase any "put equivalent position" (as defined in Rule 16a-1(h) under the Exchange Act) or liquidate or decrease any "call equivalent position" (as defined in Rule 16a-1(b) under the Exchange Act) of any Common Stock or Related Securities; (iii) pledge, hypothecate or grant any security interest in any shares of Common Stock or Related Securities; (iv) in any other way transfer or dispose of any shares of Common Stock or Related Securities; (v) enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of any shares of Common Stock or Related Securities, regardless of whether any such transaction is to be settled in securities, in cash or otherwise; (vi) announce the offering of any shares of Common Stock or Related Securities; (vii) file any registration statement under the Securities Act in respect of any shares of Common Stock or Related Securities (other than as contemplated by this Agreement with respect to the Securities); or (viii) publicly announce the intention to do any of the foregoing; provided, however, that the Company may (A) effect the transactions contemplated hereby; (B) issue shares of Common Stock, options to purchase common stock or restricted stock units, or issue shares of Common Stock upon exercise or settlement of outstanding warrants, options or restricted stock units, in each case, pursuant to any stock option, stock bonus, employee stock purchase or other stock plan or arrangement described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus; (C) issue shares of Common Stock pursuant to the exercise, conversion or exchange of convertible or exchangeable securities; (D) file a registration statement on Form S-8 to register shares of Common Stock issuable pursuant to the terms of a stock option, stock bonus, employee stock purchase or other stock incentive plan or arrangement described or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus; (E) issue shares of Common Stock in connection with any joint venture, commercial or collaborative relationship or the acquisition or license by the Company of the securities, businesses, property or other assets of another person or entity; provided, however, that in the case of clause (E), such shares of Common Stock shall not in the aggregate exceed 5% of the Company's outstanding shares of Common Stock on a fully diluted basis after giving effect to the sale of the Securities contemplated by this

Agreement; (F) assist any party subject to a Lock-Up Agreement in the establishment of a trading plan by such party pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, provided that such plan does not provide for the transfer of shares of Common Stock during the Lock-Up Period, and the establishment of such plan does not require or otherwise result in any public filings or other public announcement of such plan during such Lock-Up Period and such plan is otherwise permitted to be implemented during the Lock-up Period pursuant to the terms of the Lock-Up Agreement, if any, between such party and the Underwriters in connection with the offering of the Securities; and (G) issue Related Securities to Pharmakon Advisors, LP ("Pharmakon") or its affiliates in connection with an amendment or modification of that certain Note Purchase Agreement, dated September 12, 2019, as amended to date, by and among the Company, Pharmakon and the purchasers party thereto. For purposes of the foregoing, "Related Securities" shall mean any options or warrants or other rights to acquire shares of Common Stock or any securities exchangeable or exercisable for or convertible into shares of Common Stock, or to acquire other securities or rights ultimately exchangeable or exercisable for, or convertible into, shares of Common Stock.

- i. <u>Director and Officer Lock-Ups</u>. The Company has caused to be delivered to you prior to the date of this Agreement a Lock-Up Agreement, from each individual listed on Schedule IV. The Company will enforce the terms of each Lock-Up Agreement and issue stop-transfer instructions to the transfer agent for the Common Stock with respect to any transaction or contemplated transaction that would constitute a breach of or default under the applicable Lock-Up Agreement.
- i. <u>No Market Stabilization or Manipulation</u>. The Company has not taken and will not take, directly or indirectly, any action designed to or which would reasonably be expected to cause or result in, or which has constituted, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.
- i. <u>SEC Reports</u>. During the Prospectus Delivery Period, the Company will file on a timely basis with the Commission such periodic and special reports as required by the Rules and Regulations.
- i. <u>Internal Controls</u>. The Company and its subsidiaries will maintain such controls and other procedures, including without limitation those required by Sections 302 and 906 of the Sarbanes-Oxley Act and the applicable regulations thereunder, that are designed to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in

the Commission's rules and forms, including without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive officer and its principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure, to provide reasonable assurance that material information relating to Company, including its subsidiaries, is made known to them by others within those entities.

i. <u>Sarbanes-Oxley</u>. The Company and its subsidiaries will comply in all material respects with all applicable provisions of the Sarbanes-Oxley Act.

(xy) *Free Writing Prospectuses*. The Company represents and agrees that, unless it obtains the prior written consent of the Representative, and each Underwriter severally represents and agrees that, unless it obtains the prior written consent of the Company and the Representative, 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 required to be filed with the Commission; provided that the prior written consent of the parties hereto shall be deemed to have been given in respect of the free writing prospectuses included in Schedule II. Any such free writing prospectus consented to by the Company and the Representative is hereinafter referred to as a "Permitted Free Writing Prospectus." The Company represents that it has treated or agrees that it will treat each Permitted Free Writing Prospectus as an issuer free writing prospectus, and has complied and will comply with the requirements of Rules 164 and 433 of the Rules and Regulations applicable to any Permitted Free Writing Prospectus. The Company agrees not to take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of the Company that otherwise would not be required to be filed by the Company thereunder, but for the action of the Company. Each Underwriter severally represents and agrees that, (A) unless it obtains the prior written consent of the Company and the Representative, it has not distributed, and will not distribute any Section 5(d) Written Communication other than those listed on Schedule V, and (B) any Permitted Section 5(d) Communication undertaken by it was with entities that are qualified institutional buyers with the meaning of Rule 144A under the Act or institutions that are accredited investors within the meaning of Rule 501 under the Act.

(xvi) <u>Emerging Growth Company</u>. The Company will promptly notify the Representative if the Company ceases to be an Emerging Growth Company at any time prior to the later of (A) completion of the distribution of Securities within the meaning of the Act and (B) completion of the Lock-Up Period referenced in Section 4(ix) hereof.

1. *Conditions of Underwriters' Obligations*. The obligations of the Underwriters hereunder are subject to the accuracy, as of the date hereof and at each of the First Closing Date and, if applicable, the Second Closing Date (each, a "*Closing Date*") (as if made at such Closing Date), of and compliance with all representations, warranties and agreements of the Company contained herein, to the performance by the Company of its obligations hereunder and to the following additional conditions:

- a. <u>Required Filings</u>; <u>Absence of Certain Commission Actions</u>. If filing of the Prospectus, or any amendment or supplement thereto, or any issuer free writing prospectus, is required under the Securities Act or the Rules and Regulations, the Company shall have filed the Prospectus (or such amendment or supplement) or such issuer free writing prospectus with the Commission in the manner and within the time period so required (without reliance on Rule 424(b)(8) or Rule 164(b)); the Registration Statement shall remain effective; no stop order suspending the effectiveness of the Registration Statement or any part thereof, any Rule 462(b) Registration Statement, or any amendment thereof, nor suspending or preventing the use of the Time of Sale Prospectus, the Prospectus or any issuer free writing prospectus shall have been initiated or threatened; any request of the Commission for additional information (to be included in the Registration Statement, the Time of Sale Prospectus, the Prospectus, any issuer free writing prospectus or otherwise) shall have been complied with to your reasonable satisfaction.
- a. <u>Continued Compliance with Securities Laws</u>. No Underwriter shall have advised the Company that (i) the Registration Statement or any amendment thereof or supplement thereto contains an untrue statement of a material fact which, in your opinion, is material or omits to state a material fact which, in your opinion, is required to be stated therein or necessary to make the statements therein not misleading, or (ii) the Time of Sale Prospectus or the Prospectus, or any amendment thereof or supplement thereto, or any issuer free writing prospectus contains an untrue statement of fact which, in your opinion, is material, or omits to state a fact which, in your opinion, is material and is required to be stated therein, or necessary to make the statements therein, in light of the circumstances under which they are made, not misleading.
- a. <u>Absence of Certain Events</u>. Except as contemplated in the Time of Sale Prospectus and in the Prospectus, subsequent to the respective dates as of which information is given in the Time of Sale Prospectus, neither the Company nor any of its subsidiaries shall have incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there shall not have been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or conversion of convertible securities), or any material change in the short-term or long-term debt of the Company (other than as a result of the conversion of convertible securities), or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock of the Company or any of its subsidiaries, or any Material Adverse Effect or any development that would reasonably be expected to result in a Material Adverse Effect (whether or not arising in the ordinary course of business), or any loss by strike, fire, flood, earthquake, accident or other calamity, whether or not covered by insurance, incurred by the Company or any subsidiary, the effect of which, in any such case described above, in your

- judgment, makes it impractical or inadvisable to offer or deliver the Securities on the terms and in the manner contemplated in the Time of Sale Prospectus and in the Prospectus.
- a. <u>No Downgrade</u>. On or after the Time of Sale (i) no downgrading shall have occurred in the rating accorded any of the Company's securities by any "nationally recognized statistical organization," as that term is defined by the Commission for purposes of Rule 436(g)(2) under the Securities Act, and (ii) no such organization shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of any of the Company's securities.
- a. <u>Opinion of Company Counsel</u>. On each Closing Date, there shall have been furnished to you, as Representative of the Underwriters, the opinion and negative assurance letter of Hogan Lovells US LLP, outside counsel for the Company, dated such Closing Date, in form and substance satisfactory to the Representative.
- a. <u>Opinion of Intellectual Property Counsel</u>. On each Closing Date, there shall have been furnished to you, as Representative of the Underwriters, the opinion of Global Patent Group, LLC, intellectual property counsel for the Company, dated such Closing Date, in form and substance satisfactory to the Representative.
- a. <u>Opinion of Norwegian Counsel</u>. On each Closing Date, there shall have been furnished to you, as Representative of the Underwriters, the opinion of AGP Advokater, special local counsel for OptiNose AS, dated such Closing Date, in form and substance satisfactory to the Representative.
- a. <u>Opinion of Underwriters' Counsel</u>. On each Closing Date, there shall have been furnished to you, as Representative of the Underwriters, the opinion and negative assurance letter from Cooley LLP, counsel for the Underwriters, dated such Closing Date, in form and substance satisfactory to the Representative, and such counsel shall have received such papers and information as they request to enable them to pass upon such matters.
- a. <u>Comfort Letter</u>. On the date hereof, on the effective date of any post-effective amendment to the Registration Statement filed after the date hereof and on each Closing Date you, as Representative of the Underwriters, shall have received an accountant's "comfort" letter of Ernst & Young LLP, dated such date and addressed to you, in form and substance satisfactory to you.
- a. <u>Officers' Certificate</u>. On each Closing Date, there shall have been furnished to you, as Representative of the Underwriters, a certificate, dated such Closing Date and addressed to you, signed by the chief executive officer and by the chief financial officer of the Company, to the effect that:

- i. The representations and warranties of the Company in this Agreement are true and correct as if made at and as of such Closing Date, and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to such Closing Date;
- i. No stop order or other order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof or the qualification of the Securities for offering or sale nor suspending or preventing the use of the Time of Sale Prospectus, the Prospectus or any issuer free writing prospectus, has been issued, and no proceeding for that purpose has been instituted or, to the best of their knowledge, is contemplated by the Commission or any state or regulatory body; and
- i. Affirms the accuracy of the matters set forth in subsection (c) of this Section 5.
- a. <u>Lock-Up Agreement</u>. The Underwriters shall have received all of the Lock-Up Agreements referenced in Section 4 and the Lock-Up Agreements shall remain in full force and effect.
- a. *FINRA No Objections*. FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.
- a. <u>Other Documents</u>. The Company shall have furnished to you and counsel for the Underwriters such additional documents, certificates and evidence as you or they may have reasonably requested related to the issuance of the Securities.
- a. <u>Exchange Listing</u>. The Company shall have filed a listing of additional shares notification with Nasdaq with respect to the Securities and received notification from Nasdaq that such filing has been submitted.

All such opinions, certificates, letters and other documents will be in compliance with the provisions hereof only if they are reasonably satisfactory in form and substance to you and counsel for the Underwriters. The Company will furnish you with such conformed copies of such opinions, certificates, letters and other documents as you shall reasonably request.

1. Indemnification and Contribution.

a. <u>Indemnification by the Company</u>. The Company agrees to indemnify and hold harmless each Underwriter, its affiliates, directors and officers and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company), insofar as

such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon: (i) an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the 430A Information and any other information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to the Rules and Regulations, if applicable, any Preliminary Prospectus, the Time of Sale Prospectus, the Prospectus, or any amendment or supplement thereto, any issuer free writing prospectus, any issuer information that the Company has filed or is required to file pursuant to Rule 433(d) of the Rules and Regulations, any roadshow materials, or any Permitted Section 5(d) Communication, (ii) the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or (iii) any investigation or proceeding by any governmental authority relating to or arising out of the matters described in the foregoing clauses (i) or (ii), whether commenced or threatened (whether or not any Underwriter is a target of or party to such investigation or proceeding), and will reimburse each Underwriter for any legal or other expenses reasonably incurred by it in connection with investigating or defending against such loss, claim, damage, liability or action as such expenses are incurred; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in reliance upon and in conformity with written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof; it being understood and agreed that the only information furnished by an Underwriter consists of the information described as such in Section 6(e).

a. <u>Indemnification by the Underwriters</u>. Each Underwriter will, severally and not jointly, indemnify and hold harmless the Company, its affiliates, directors and officers and each person, if any, who controls the Company within the meaning of Section 15 of the Act and Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities to which the Company may become subject, under the Act or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) (i) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Time of Sale Prospectus, the Prospectus, or any amendment or supplement thereto, or any issuer free writing prospectus, or any issuer information that the Company has filed or is required to file pursuant to Rule 433(d) of the Rules and Regulations or any road show materials, or (ii) arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information furnished to the Company by you, or by such

Underwriter through you, specifically for use in the preparation thereof (it being understood and agreed that the only information furnished by an Underwriter consists of the information described as such in Section 6(e)), and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with investigating or defending against any such loss, claim, damage, liability or action as such expenses are incurred.

a. Notice and Procedures. Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party except to the extent such indemnifying party has been materially prejudiced by such failure (through the forfeiture of substantive rights or defenses). In case any such action shall be brought against any indemnified party, and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation; provided, however, that if, in the sole judgment of the Representative, it is advisable for the Underwriters to be represented as a group by separate counsel, the Representative shall have the right to employ a single counsel (in addition to local counsel) to represent the Representative and all Underwriters who may be subject to liability arising from any claim in respect of which indemnity may be sought by the Underwriters under subsection (a) of this Section 6, in which event the reasonable fees and expenses of such separate counsel shall be borne by the indemnifying party or parties and reimbursed to the Underwriters as incurred. An indemnifying party shall not be obligated under any settlement agreement relating to any action under this Section 6 to which it has not agreed in writing. In addition, no indemnifying party shall, without the prior written consent of the indemnified party (which consent shall not be unreasonably withheld or delayed, effect any settlement of any pending or threatened proceeding unless such settlement includes an unconditional release of such indemnified party for all liability on claims that are the subject matter of such proceeding and does not include a statement as to, or an admission of, fault, culpability or a failure to act by or on behalf of an indemnified party. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by this Section 6(c) hereof, the indemnifying party shall be liable for any settlement of any proceeding effected

without its written consent if (i) such settlement is entered into more than 30 days after receipt by such indemnifying party of the aforesaid request together with the terms of such settlement and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement; provided, that an indemnifying party shall not be liable for any such settlement effected without its consent if such indemnifying party, prior to the date of such settlement, (1) reimburses such indemnified party in accordance with such request for the amount of such fees and expenses of counsel as the indemnifying party believes in good faith to be reasonable and owing in accordance with the provisions of this Section 6, and (2) provides written notice to the indemnified party that the indemnifying party disputes in good faith the reasonableness of the unpaid balance of such fees and expenses or its liability with respect thereto.

a. *Contribution: Limitations on Liability: Non-Exclusive Remedy.* If the indemnification provided for in this Section 6 is unavailable or insufficient to hold harmless an indemnified party under subsection (a) or (b) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a) or (b) above, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Securities or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bears to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters and the parties' relevant intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (d) were to be determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to in the first sentence of this subsection (d). The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection

with investigating or defending against any action or claim which is the subject of this subsection (d). Notwithstanding the provisions of this subsection (d), no Underwriter shall be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by such Underwriter with respect to the Securities purchased by it hereunder exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this subsection (d) to contribute are several in proportion to their respective underwriting obligations and not joint. The remedies provided for in this Section 6 are not exclusive and shall not limit any rights or remedies that might otherwise be available to any indemnified party at law or in equity.

- a. <u>Information Provided by the Underwriters</u>. The Underwriters severally confirm and the Company acknowledges that the statements with respect to the public offering of the Securities by the Underwriters set forth in second, third and fourth paragraphs under the heading entitled "Price Stabilization, Short Positions and Penalty Bids," and the information under the heading entitled "Electronic Distribution," each under the caption "Underwriting" in the Time of Sale Prospectus and in the Prospectus are correct and constitute the only information concerning such Underwriters furnished in writing to the Company by or on behalf of the Underwriters specifically for inclusion in the Registration Statement, any Preliminary Prospectus, the Time of Sale Prospectus, the Prospectus or any issuer free writing prospectus.
- 1. **Representations and Agreements to Survive Delivery**. All representations, warranties, and agreements of the Company herein or in certificates delivered pursuant hereto, including but not limited to the agreements of the Underwriters and the Company contained in Section 6 hereof, shall remain operative and in full force and effect regardless of any investigation made by or on behalf of any Underwriter or any controlling person thereof, or the Company or any of its officers, directors, or controlling persons, and shall survive delivery of, and payment for, the Securities to and by the Underwriters hereunder and any termination of this Agreement.

1. Substitution of Underwriters.

a. <u>Obligation to Purchase Under Certain Circumstances</u>. If any Underwriter or Underwriters shall fail to take up and pay for the amount of Firm Shares agreed by such Underwriter or Underwriters to be purchased hereunder, upon tender of such Firm Shares in accordance with the terms hereof, and the amount of Firm Shares not purchased does not aggregate to more than 10% of the total amount of Firm Shares set forth in Schedule I hereto, the remaining Underwriters shall be obligated to take up and pay for (in proportion to their respective underwriting obligations hereunder as set forth in Schedule I hereto except as may otherwise be

determined by you) the Firm Shares that the withdrawing or defaulting Underwriters agreed but failed to purchase.

- a. <u>Termination Under Certain Circumstances</u>. If any Underwriter or Underwriters shall fail to take up and pay for the amount of Firm Shares agreed by such Underwriter or Underwriters to be purchased hereunder, upon tender of such Firm Shares in accordance with the terms hereof, and the amount of Firm Shares not purchased aggregates to more than 10% of the total amount of Firm Shares set forth in Schedule I hereto, and arrangements satisfactory to you for the purchase of such Firm Shares by other persons are not made within 36 hours thereafter, this Agreement shall terminate. In the event of any such termination, the Company shall not have any liability to any Underwriter (except to the extent provided in Section 4 (vii) and Section 6 hereof) nor shall any Underwriter (other than an Underwriter who shall have failed, otherwise than for some reason permitted under this Agreement, to purchase the amount of Firm Shares agreed by such Underwriter to be purchased hereunder) be under any liability to the Company (except to the extent provided in Section 6 hereof).
- a. <u>Postponement of Closing</u>. If Firm Shares to which a default relates are to be purchased by the non-defaulting Underwriters or by any other party or parties, the Representative or the Company shall have the right to postpone the First Closing Date for not more than seven business days in order that the necessary changes in the Registration Statement, in the Time of Sale Prospectus, in the Prospectus or in any other documents, as well as any other arrangements, may be effected. As used herein, the term "Underwriter" includes any person substituted for an Underwriter under this Section 8.
- a. <u>No Relief from Liability</u>. No action taken pursuant to this Section 8 shall relieve any defaulting Underwriter from liability, if any, in respect of such default.

1. Termination of this Agreement.

a. <u>Right to Terminate</u>. You, as Representative of the Underwriters, shall have the right to terminate this Agreement by giving notice to the Company as hereinafter specified at any time at or prior to the First Closing Date, and the option referred to in Section 3(b), if exercised, may be cancelled at any time prior to the Second Closing Date, if (i) the Company shall have failed, refused or been unable, at or prior to such Closing Date, to perform in any material respect any agreement on its or their part to be performed hereunder, (ii) any condition of the Underwriters' obligations hereunder is not fulfilled, (iii) trading in the Company's Common Stock shall have been suspended by the Commission or Nasdaq or trading in securities generally on Nasdaq or the New York Stock Exchange shall have been suspended, (iv) minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required, on Nasdaq or the New York Stock Exchange, by such Exchange or by order of the Commission or any other Governmental Authority having jurisdiction, (v) a

banking moratorium shall have been declared by federal or New York state authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States, or (vi) there shall have occurred any attack on, outbreak or escalation of hostilities or act of terrorism involving the United States, any declaration by the United States of a national emergency or war, any change in financial markets, any substantial change or development involving a prospective substantial change in United States or international political, financial or economic conditions, or any other calamity or crisis that, in your judgment, is material and adverse and makes it impractical or inadvisable to proceed with the completion of the sale of and payment for the Securities. Any such termination shall be without liability of any party to any other party except that the provisions of Section 4 (vii) and Section 6 hereof shall at all times be effective and shall survive such termination.

- a. *Notice of Termination*. If you elect to terminate this Agreement as provided in this Section, the Company shall be notified promptly by you by telephone, confirmed by letter.
- a. *No Relief from Liability*. No action taken pursuant to this Section 9 shall relieve the Company so defaulting from liability, if any, in respect of such default.
- 1. *Notices*. Except as otherwise provided herein, all communications hereunder shall be in writing and, if to the Underwriters, shall be mailed via overnight delivery service or hand delivered via courier to the Representative c/o Piper Sandler & Co., U.S. Bancorp Center, 800 Nicollet Mall, Minneapolis, Minnesota 55402, Attention: Equity Capital Markets, with a copy to Piper Sandler General Counsel at 800 Nicollet Mall, Minneapolis, MN 55402 and LegalCapMarkets@psc.com and a copy (which shall not constitute notice) to Cooley LLP, One Freedom Square, Reston Town Center, 11951 Freedom Drive, 14th Floor, Reston, VA 20191-5640, Attention: Brian F. Leaf; or if to the Company, shall be mailed or delivered to it at 1020 Stony Hill Road, Suite 300, Yardley, PA 19067, Attention: Chief Legal Officer, with a copy (which shall not constitute notice) to Hogan Lovells US LLP, 1735 Market Street, 23rd Floor, Philadelphia, PA 19103, Attention: Steven J. Abrams. Any party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.
- 1. **Persons Entitled to Benefit of Agreement.** This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns and the controlling persons, officers and directors referred to in Section 6. Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable remedy or claim under or in respect of this Agreement or any provision herein contained. The term "successors and assigns" as herein used shall not include any purchaser, as such purchaser, of any of the Securities from any of the Underwriters.

1. Absence of Fiduciary Relationship. The Company acknowledges and agrees that: (a) the Representative has been retained solely to act as an underwriter in connection with the sale of the Securities and that no fiduciary, advisory or agency relationship between the Company and the Representative has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Representative has advised or is advising the Company on other matters; (b) the price and other terms of the Securities set forth in this Agreement were established by the Company following discussions and arms-length negotiations with the Representative and the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement; (c) it has been advised that the Representative and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Representative has no obligation to disclose such interest and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; (d) it has been advised that the Representative is acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of the Representative and the other Underwriters, and not on behalf of the Company; (e) it waives to the fullest extent permitted by law, any claims it may have against the Representative for breach of fiduciary duty or alleged breach of fiduciary duty in respect of any of the transactions contemplated by this Agreement and agrees that the Representative shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary duty claim on behalf of or in right of the Company, including stockholders, employees or creditors of the Company.

1. Recognition of the U.S. Special Resolution Regimes.

- a. In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.
- a. In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.
- a. As used in this section:

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

"Covered Entity" means any of the following: (i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b); a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b);

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

- "*U.S. Special Resolution Regime*" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.
 - 1. Governing Law; Waiver of Jury Trial. This Agreement and any transaction contemplated by this Agreement and any claim, controversy or dispute arising under or related thereto shall be governed by and construed in accordance with the laws of the State of New York without regard to principles of conflict of laws that would result in the application of any other law than the laws of the State of New York. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby may be instituted in the federal courts of the United States of America located in the Borough of Manhattan in the City of New York or the courts of the State of New York in each case located in the Borough of Manhattan in the City of New York (collectively, the "Specified Courts"), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to such party's address set forth above shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.
 - 1. *Counterparts*. This Agreement may be executed in one or more counterparts and, if executed in more than one counterpart, the executed counterparts shall each be deemed to be an original and all such counterparts shall together constitute one and the same instrument. Counterparts may be delivered via facsimile or electronic mail (including, without limitation, "pdf", "tif" or "jpg" or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

1. *General Provisions*. This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof. This Agreement may not be amended or modified unless in writing by all of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit. The Section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement.

[Signature Page Follows]

Please sign and return to the Company the enclosed duplicates of this letter whereupon this letter will become a binding agreement between the Company and the Underwriters in accordance with its terms.

Very truly yours,

OptiNose, Inc.

By <u>/s/ Keith Goldan</u>
Name: Keith Goldan
Title: Chief Financial Officer

Confirmed as of the date first above mentioned, on behalf of themselves and the other Underwriters named in Schedule I hereto.

Piper Sandler & Co.

By <u>/s/ Neil Riley</u>
Managing Director
Equity Capital Markets

SCHEDULE I

<u>Underwriter</u>	Number of Firm Shares (1).
Piper Sandler & Co.	20,000,000
Cantor Fitzgerald & Co.	<u>5,000,000</u>
Total	<u>25,000,000</u>

(1) The Underwriters may purchase up to an additional 3,750,000 Option Shares, to the extent the option described in Section 3(b) of the Agreement is exercised, in the proportions and in the manner described in the Agreement.

SCHEDULE II

Certain Permitted Free Writing Prospectuses

None.

SCHEDULE III

Pricing Information

Price per share to the public: \$1.60

Number of shares being sold: 25,000,000

Number of shares potentially issuable pursuant to the option to purchase additional shares: 3,750,000

SCHEDULE IV

List of Individuals Executing Lock-Up Agreements

Officers

a. Peter K. Miller

- b. Ramy A. Mahmoud, M.D., M.P.H.
- c. Victor M. Clavelli
- d. Keith A. Goldan
- e. Michael F. Marino

Non-Employee Directors

- a. Joseph C. Scodari
- b. Wilhelmus Groenhuysen
- C. Sandra L. Helton
- d. Tomas J. Heyman
- e. Catherine E. Owen

SCHEDULE V

Permitted Section 5(d) Communications

Investor presentation used in wall-cross marketing beginning November 10, 2021.

EXHIBIT A

Form of Lock-Up Agreement

November _____, 2021 Piper Sandler & Co. 800 Nicollet Mall, Suite 800 Minneapolis, MN 55402

RE: OptiNose, Inc. (the "Company")

Ladies & Gentlemen:

The undersigned is an owner of shares of common stock, par value \$0.001 per share, of the Company ("Shares") or of securities convertible into, exchangeable or exercisable for, or settled in Shares. The Company proposes to conduct a public offering of Shares to be sold by the Company (the "Offering") for which Piper Sandler & Co. will act as representative (the "Representative") of the underwriters. The undersigned recognizes that the Offering will benefit each of the Company and the undersigned. The undersigned acknowledges that the underwriters are relying on the representations and agreements of the undersigned contained in this letter agreement in conducting the Offering and entering into an underwriting agreement (the "Underwriting Agreement") and other underwriting arrangements with the Company with respect to the Offering.

Annex A sets forth definitions for capitalized terms used in this letter agreement that are not defined in the body of this letter agreement. Those definitions are a part of this letter agreement.

In consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby agrees that, during the Lock-up Period, subject to the exceptions set forth in this letter agreement, the undersigned will not (and will cause any Family Member not to), without the prior written consent of the Representative, which consent may be withheld in its discretion:

- a. Sell or Offer to Sell any Shares or Related Securities currently or hereafter owned either of record or beneficially (as defined in Rule 13d-3 under the Exchange Act) by the undersigned or such Family Member,
- a. enter into any Swap,
- a. make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any Shares or Related Securities, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration, or
- a. publicly announce any intention to do any of the foregoing.

The foregoing will not apply to the registration of the offer and sale of the Shares, and the sale of the Shares to the underwriters, in each case as contemplated by the Underwriting Agreement. In addition, the foregoing restrictions shall not apply to (i) sales of Shares acquired in the Offering or after the completion of the Offering; provided that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with such sales during the Lock-Up Period; (ii) the transfer of Shares or Related Securities by gift, (iii) the transfer of Shares or Related Securities by will or intestate succession to the legal representative, heir or beneficiary of the undersigned, (iv) the transfer of Shares or Related Securities to a trust whose beneficiaries consist exclusively of one or more of the undersigned and/or a member of the undersigned's Immediate Family, (v) transfers or dispositions of the undersigned's Shares or Related Securities to any corporation, partnership, limited liability company or other entity all of the beneficial ownership interests of which are held by the undersigned or any Family Member, (vi) distributions of Shares or Related Securities beneficially owned by the undersigned to limited partners, general partners, members, stockholders or other equityholders or affiliates of the undersigned, (vii) the transfer of Shares or Related Securities by operation of law, including pursuant to a domestic order or negotiated divorce settlement or (viii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity, the transfer of Shares or Related Securities to another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined in Rule 405 promulgated under the Securities Act) of the undersigned or to any investment fund or other entity controlled or managed by, or under common control or management as, the undersigned, provided that any such transfer or distribution set forth in (ii) through (vii) above shall not involve a disposition for value; provided, however, that in any such case set forth in (ii) through (vii) above, it shall be a condition to such transfer that:

a. each transferee executes and delivers to the Representative an agreement in form and substance satisfactory to the Representative stating that such transferee is receiving and holding such Shares and/or Related Securities subject to the provisions of this letter agreement and agrees not to Sell or Offer to Sell such Shares and/or Related Securities, engage in any Swap or engage in any other activities restricted under this

letter agreement during the Lock-Up Period except in accordance with this letter agreement (as if such transferee had been an original signatory hereto), and

a. prior to the expiration of the Lock-up Period, no public disclosure or filing under the Exchange Act by any party to the transfer (donor, donee, transferor or transferee) shall be required, or made voluntarily, reporting a reduction in beneficial ownership of Shares or Related Securities in connection with such transfer, unless, in the case of a distribution excepted pursuant to clause (vi) above, such filing indicates in the footnotes thereto that the filing relates to a distribution to limited partners, general partners, members, shareholders or other equityholders or affiliates of the undersigned, as applicable, and that no Shares were sold to the public by the reporting person.

Furthermore, notwithstanding the restrictions imposed by this letter agreement, the undersigned may (i) exercise an option to purchase Shares granted under any equity incentive plan, receive Shares that vest under restricted stock units or purchase shares under any stock purchase plan of the Company, each existing as of the date of the Prospectus and described or incorporated by reference in the Prospectus, *provided* that the Shares issued upon such exercise or purchase shall continue to be subject to the restrictions on transfer set forth in this letter agreement, (ii) establish a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of Shares, provided that such plan does not provide for any transfers of Shares or Related Securities during the Lock-up Period and the entry into such plan is not publicly disclosed, including in any filing under the Exchange Act, during the Lock-up Period or (iii) Sell or transfer Shares or Related Securities (A) to satisfy tax withholding obligations of the undersigned in connection with the vesting or exercise of equity awards by the undersigned pursuant to the Company's equity incentive plan existing as of the date of the Prospectus and described or incorporated by reference in the Prospectus, (B) pursuant to a net exercise or cashless exercise (to satisfy exercise price or related withholding obligations) by the undersigned of outstanding equity awards pursuant to the Company's equity incentive plan existing as of the date of the Prospectus and described or incorporated by reference in the Prospectus, provided that any Shares acquired upon the net exercise or cashless exercise of equity awards described in this clause (B) shall be subject to the restrictions set forth in this letter agreement, (C) pursuant to a bona fide third-party tender offer for all outstanding shares of the Company, merger, consolidation or other similar transaction made to all holders of the Company's securities involving a change of control of the Company (including, without limitation, the entering into any lock-up, voting or similar agreement pursuant to which the undersigned may agree to transfer, sell, tender or otherwise dispose of common stock or other such securities in connection with such transaction, or vote any common stock or other such securities in favor of any transaction), provided that in the event that such tender offer, merger, consolidation or other such transaction is not completed, such securities held by the undersigned shall remain subject to the provisions of this letter agreement, (D) that may be deemed to have occurred as a result of the exercise of warrants, provided that the restrictions set forth in this letter agreement shall apply to any of the undersigned's Shares or Related Securities issued upon such exercise, or (E) covered by trading plans adopted pursuant to Rule 10b5-1 under the Exchange Act, copies of which have been provided to the Representative; provided that, in the case of a transfer pursuant to clause (A) or (B) above, if the undersigned is required to make a filing under the Exchange Act reporting a reduction in beneficial ownership of Shares during the Lock-up Period, the undersigned shall include a statement in such report to

the effect that the purpose of such transfer was to cover tax obligations of the undersigned in connection with such exercise.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of Shares or Related Securities held by the undersigned and the undersigned's Family Members, if any, except in compliance with the foregoing restrictions.

With respect to the Offering only, the undersigned waives any registration rights relating to registration under the Securities Act of the offer and sale of any Shares and/or any Related Securities owned either of record or beneficially by the undersigned, including any rights to receive notice of the Offering.

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

Whether or not the Offering occurs as currently contemplated or at all depends on market conditions and other factors. The Offering will only be made pursuant to the Underwriting Agreement, the terms of which are subject to negotiation between the Company and the underwriters.

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

Notwithstanding anything herein to the contrary, if (a) the initial closing of the Offering has not occurred prior to November 30, 2021, (b) after being executed, the Underwriting Agreement (other than the provisions thereof that survive termination) shall terminate or be terminated prior to payment for and delivery of the Shares to be sold thereunder or (c) the Company notifies the underwriters in writing that it does not intend to proceed with the Offering, then this letter agreement shall terminate and the undersigned shall be released from all obligations hereunder upon the earliest to occur of the events specified above.

This letter agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

[signature page follows]

Very truly yours,	
	Name of Security Holder (Print exact name)
	By:Signature
	If not signing in an individual capacity:

Name of Authorized Signatory (Print)	
Title of Authorized Signatory (Print)	

(indicate capacity of person signing if signing as custodian, trustee, or on behalf of an

entity)

Certain Defined Terms <u>Used in Lock-up Agreement</u>

For purposes of the letter agreement to which this Annex A is attached and of which it is made a part:

- a. "Call Equivalent Position" shall have the meaning set forth in Rule 16a-1(b) under the Exchange Act.
- a. "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.
- a. "Family Member" shall mean the spouse of the undersigned, an immediate family member of the undersigned or an immediate family member of the undersigned's spouse, in each case living in the undersigned's household or whose principal residence is the undersigned's household (regardless of whether such spouse or family member may at the time be living elsewhere due to educational activities, health care treatment, military service, temporary internship or employment or otherwise).
- a. "Immediate Family" shall have the meaning set forth in Rule 16a-1(e) under the Exchange Act.
- a. "**Lock-up Period**" shall mean the period beginning on the date hereof and continuing through the close of trading on the date that is 90 days after the date of the Prospectus (as defined in the Underwriting Agreement).
- a. "Put Equivalent Position" shall have the meaning set forth in Rule 16a-1(h) under the Exchange Act.
- a. "Related Securities" shall mean any options or warrants or other rights to acquire Shares or any securities exchangeable or exercisable for or convertible into Shares, or to acquire other securities or rights ultimately exchangeable or exercisable for or convertible into Shares.
- a. "Securities Act" shall mean the Securities Act of 1933, as amended.
- a. "Sell or Offer to Sell" shall mean to:
 - i. sell, offer to sell, contract to sell or lend,

- i. effect any short sale or establish or increase a Put Equivalent Position or liquidate or decrease any Call Equivalent Position
- i. pledge, hypothecate or grant any security interest in, or
- i. in any other way transfer or dispose of,

in each case whether effected directly or indirectly.

a. "Swap" shall mean any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of Shares or Related Securities, regardless of whether any such transaction is to be settled in securities, in cash or otherwise.

Capitalized terms not defined in this Annex A shall have the meanings given to them in the body of this letter agreement.



Hogan Lovells US LLP 1735 Market Street, Floor 23 Philadelphia, PA 19103 T + 1 267 675 460 F +1 267 675 460 www.hoganlovells.com

November 18, 2021

Board of Directors OptiNose, Inc. 1020 Stony Hill Road, Suite 300 Yardley, Pennsylvania 19067

Ladies and Gentlemen:

We are acting as counsel to OptiNose, Inc., a Delaware corporation (the "**Company**"), in connection with its registration statement on Form S-3 (File No. 333-258707) (the "**Registration Statement**"), filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "**Act**"), relating to the proposed public offering of up to 28,750,000 shares of common stock, par value \$0.001 per share, of the Company (the "**Shares**"), pursuant to the Underwriting Agreement, dated as of November 16, 2021, by and between the Company and Piper Sandler & Co., as the representative of the underwriters named therein (the "**Underwriting Agreement**"), as described in the Prospectus, dated August 31, 2021 (the "**Registration Statement Prospectus**"), which forms a part of the Registration Statement, as supplemented by the Prospectus Supplement, dated November 16, 2021 (together with the Registration Statement Prospectus, the "**Prospectus**"). This opinion letter is furnished to you at your request to enable you to fulfill the requirements of Item 601(b)(5) of Regulation S-K, 17 C.F.R. § 229.601(b)(5), in connection with the Registration Statement.

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

This opinion letter is based as to matters of law solely on the Delaware General Corporation Law, as amended. We express no opinion herein as to any other statutes, rules or regulations. As used herein, the term "Delaware General Corporation Law, as amended" includes the statutory provisions contained therein, all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting these laws.

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Based upon, subject to and limited by the foregoing, we are of the opinion that following (i) execution and delivery by the Company of the Underwriting Agreement, (ii) issuance and sale of the Shares pursuant to the terms of the Underwriting Agreement, and (iii) receipt by the Company of the consideration for the Shares specified in the resolutions of the Board of Directors and the Pricing Committee of the Board of Directors, the Shares will be validly issued, fully paid and nonassessable.

This opinion letter has been prepared for use in connection with the Registration Statement. We assume no obligation to advise of any changes in the foregoing subsequent to the effective date of the Registration Statement.

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

Very truly yours,

/s/ HOGAN LOVELLS US LLP

HOGAN LOVELLS US LLP



Optinose Announces Proposed Public Offering of Common Stock

YARDLEY, Pa., Nov. 15, 2021 – Optinose (NASDAQ:OPTN), a pharmaceutical company focused on patients treated by ear, nose and throat (ENT) and allergy specialists, today announced that it intends to offer and sell shares of its common stock in an underwritten public offering. All shares of common stock to be sold in the offering will be sold by Optinose. In addition, Optinose is expected to grant the underwriters an option for a period of 30 days to purchase up to an additional 15% of the total number of shares to be offered at the public offering price, less the underwriting discount. The public offering price has not yet been determined. The offering is subject to market and other conditions, and there can be no assurance as to whether or when the offering may be completed.

Optinose intends to use the net proceeds of the offering for working capital and general corporate purposes, including the commercialization of XHANCE, the clinical development of XHANCE for a follow-on indication for the treatment of chronic sinusitis and other potential development programs.

Piper Sandler is acting as the lead book-running manager and Cantor Fitzgerald & Co. is acting as passive book-running manager for the offering.

The securities described above are being offered by Optinose pursuant to a shelf registration statement on Form S-3 (No. 333-258707) previously filed with the Securities and Exchange Commission (SEC) on August 11, 2021 and declared effective by the SEC on August 31, 2021.

The securities will be offered by means of a prospectus supplement and accompanying prospectus relating to the offering that form a part of the registration statement. A preliminary prospectus supplement and the accompanying prospectus relating to and describing the terms of the offering will be filed with the SEC and will be available on the SEC's website at http://www.sec.gov. Copies of the final prospectus supplement, when available, and accompanying prospectus relating to the offering may be obtained from: Piper Sandler & Co., Attention: Prospectus Department, 800 Nicollet Mall, J12S03, Minneapolis, Minnesota 55402, by email at prospectus@psc.com, or by phone at (800) 747-3924 or Cantor Fitzgerald & Co., Attn: Capital Markets, 499 Park Avenue, 6th floor, New York, NY 10022; Email: prospectus@cantor.com.

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

About Optinose

Optinose is a specialty pharmaceutical company focused on serving the needs of patients cared for by ear, nose and throat (ENT) and allergy specialists.

Cautionary Note on Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. All statements that are not historical facts are hereby identified as forward-looking statements for this purpose and include, among others, statements regarding the terms of the proposed public offering. Optinose's expectations with respect to granting the underwriters a 30-day option to purchase additional shares, the completion and timing of the proposed public offering and the expected use of proceeds from the proposed offering. Forwardlooking statements are based upon management's current expectations and assumptions and are subject to a number of risks, uncertainties and other factors that could cause actual results and events to differ materially and adversely from those indicated by such forward-looking statements including, among others: satisfaction of the customary closing conditions of the offering; delays in obtaining required stock exchange or other regulatory approvals; stock price volatility and risks and uncertainties related to market conditions; the impact of general business and economic conditions; and the risks, uncertainties and other factors discussed under the caption "Item 1A. Risk Factors" and elsewhere in Optinose's most recent Form 10-K and Form 10-Q filings with the Securities and Exchange Commission - which are available at www.sec.gov. As a result, you are cautioned not to place undue reliance on any forward-looking statements. Any forward-looking statements made in this press release speak only as of the date of this press release, and Optinose undertakes no obligation to update such forward-looking statements, whether as a result of new information, future developments or otherwise.

Optinose Investor Contact Jonathan Neely jonathan.neely@optinose.com 267.521.0531

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Optinose Announces Pricing of Public Offering of Common Stock

YARDLEY, Pa., November 16, 2021 – Optinose (NASDAQ:OPTN), a pharmaceutical company focused on patients treated by ear, nose and throat (ENT) and allergy specialists, today announced the pricing of an underwritten public offering of 25,000,000 shares of its common stock at a public offering price of \$1.60 per share, for gross proceeds of \$40.0 million to Optinose, before deducting underwriting discounts and before offering expenses. All shares of common stock in the offering are being offered by Optinose. In addition, Optinose has granted the underwriters an option for a period of 30 days to purchase up to an additional 3,750,000 shares at the public offering price, less the underwriting discount. The offering is expected to close on or about November 18, 2021, subject to the satisfaction of customary closing conditions.

Optinose intends to use the net proceeds of the offering for working capital and general corporate purposes, including the commercialization of XHANCE, the clinical development of XHANCE for a follow-on indication for the treatment of chronic sinusitis and other potential development programs.

Piper Sandler is acting as the lead book-running manager and Cantor. is acting as passive book-running manager for the offering.

The securities described above are being offered by Optinose pursuant to a shelf registration statement on Form S-3 (No. 333-258707) previously filed with the Securities and Exchange Commission (SEC) on August 11, 2021 and declared effective by the SEC on August 31, 2021.

The securities are being offered by means of a prospectus supplement and accompanying prospectus relating to the offering that form a part of the registration statement. A preliminary prospectus supplement relating to the offering was filed with the SEC on November 15, 2021 and is available on the SEC's website at http://www.sec.gov. The final prospectus supplement relating to and describing the terms of the offering will be filed with the SEC and will also be available on the SEC's website. Before investing in the offering, you should read each of the prospectus supplement and the accompanying prospectus relating to the offering in their entirety as well as the other documents that Optinose has filed with the SEC that are incorporated by reference in the prospectus supplement and the accompanying prospectus relating to the offering, which provide more information about Optinose and the offering. Copies of the final prospectus supplement, when available, and accompanying prospectus relating to the offering may be obtained from: Piper Sandler & Co., Attention: Prospectus Department,

800 Nicollet Mall, J12S03, Minneapolis, Minnesota 55402, by email at prospectus@psc.com, or by phone at (800) 747-3924 or Cantor Fitzgerald & Co., Attn: Capital Markets, 499 Park Avenue, 4th floor, New York, NY 10022; Email: prospectus@cantor.com.

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

About Optinose

Optinose is a specialty pharmaceutical company focused on serving the needs of patients cared for by ear, nose and throat (ENT) and allergy specialists.

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This press release contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. All statements that are not historical facts are hereby identified as forward-looking statements for this purpose and include, among others, statements regarding the closing of the public offering and the expected proceeds and use of proceeds from the public offering. Forward-looking statements are based upon management's current expectations and assumptions and are subject to a number of risks, uncertainties and other factors that could cause actual results and events to differ materially and adversely from those indicated by such forward-looking statements including, among others: satisfaction of the customary closing conditions of the offering; delays in obtaining required stock exchange or other regulatory approvals; stock price volatility and risks and uncertainties related to market conditions; the impact of general business and economic conditions; and the risks, uncertainties and other factors discussed under the caption "Item 1A. Risk Factors" and elsewhere in Optinose's most recent Form 10-K and Form 10-Q filings with the Securities and Exchange Commission - which are available at www.sec.gov. As a result, you are cautioned not to place undue reliance on any forward-looking statements. Any forward-looking statements made in this press release speak only as of the date of this press release, and Optinose undertakes no obligation to update such forward-looking statements, whether as a result of new information, future developments or otherwise.

Optinose Investor Contact Jonathan Neely jonathan.neely@optinose.com 267.521.0531

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Optinose Announces Closing of \$46.0 Million Public Offering of Common Stock

YARDLEY, Pa., November 18, 2021 – Optinose (NASDAQ:OPTN), a pharmaceutical company focused on patients treated by ear, nose and throat (ENT) and allergy specialists, today announced the closing of the previously announced underwritten public offering of 28,750,000 shares of its common stock at a public offering price of \$1.60 per share, including the exercise in full by the underwriters of their option to purchase up to 3,750,000 additional shares of common stock. The gross proceeds of the offering to Optinose are \$46.0 million, before deducting underwriting discounts and before offering expenses.

Optinose intends to use the net proceeds of the offering for working capital and general corporate purposes, including the commercialization of XHANCE, the clinical development of XHANCE for a follow-on indication for the treatment of chronic sinusitis and other potential development programs.

Piper Sandler acted as the lead book-running manager and Cantor acted as passive book-running manager for the offering.

The securities described above were offered by Optinose pursuant to a shelf registration statement on Form S-3 (No. 333-258707) previously filed with the Securities and Exchange Commission (SEC) on August 11, 2021 and declared effective by the SEC on August 31, 2021.

The securities were offered by means of a prospectus supplement and accompanying prospectus relating to the offering that form a part of the registration statement. A preliminary prospectus supplement relating to the offering was filed with the SEC on November 15, 2021. A final prospectus supplement relating to and describing the terms of the offering was filed with the SEC and is available on the SEC's website at http://www.sec.gov. Copies of the final prospectus supplement and accompanying prospectus relating to the offering may be obtained from: Piper Sandler & Co., Attention: Prospectus Department, 800 Nicollet Mall, J12S03, Minneapolis, Minnesota 55402, by email at prospectus@psc.com, or by phone at (800) 747-3924 or Cantor Fitzgerald & Co., Attn: Capital Markets, 499 Park Avenue, 4th floor, New York, NY 10022; Email: prospectus@cantor.com.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of, these securities in any state or jurisdiction in which such

offer, solicitation or sale would be unlawful prior to registration or qualification of these securities under the securities laws of any such state or jurisdiction.

About Optinose

Optinose is a specialty pharmaceutical company focused on serving the needs of patients cared for by ear, nose and throat (ENT) and allergy specialists.

Cautionary Note on Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. All statements that are not historical facts are hereby identified as forward-looking statements for this purpose and include, among others, statements regarding the use of proceeds from the public offering. Forward-looking statements are based upon management's current expectations and assumptions and are subject to a number of risks, uncertainties and other factors that could cause actual results and events to differ materially and adversely from those indicated by such forward-looking statements including, among others: stock price volatility and risks and uncertainties related to market conditions; the impact of general business and economic conditions; and the risks, uncertainties and other factors discussed under the caption "Item 1A. Risk Factors" and elsewhere in Optinose's most recent Form 10-K and Form 10-Q filings with the Securities and Exchange Commission - which are available at www.sec.gov. As a result, you are cautioned not to place undue reliance on any forward-looking statements. Any forward-looking statements made in this press release speak only as of the date of this press release, and Optinose undertakes no obligation to update such forward-looking statements, whether as a result of new information, future developments or otherwise.

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