
**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): **August 30, 2019**

ZYNERBA PHARMACEUTICALS, INC.

(Exact Name of Issuer as Specified in Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

001-37526
(Commission
File Number)

26-0389433
(I.R.S. Employer
Identification No.)

80 W. Lancaster Avenue, Suite 300
Devon, PA 19333
(Address of Principal Executive Offices)

(484) 581-7505
(Registrant's Telephone Number, Including Area Code)

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

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

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

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$0.001 par value per share	ZYNE	The NASDAQ Global Market

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

Emerging growth company

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

Item 1.01 Entry into a Material Definitive Agreement

On August 30, 2019, Zynerva Pharmaceuticals, Inc. (the “Company”) entered into a Controlled Equity OfferingSM Sales Agreement (the “Agreement”) with Cantor Fitzgerald & Co., Canaccord Genuity LLC, H.C. Wainwright & Co., LLC and Ladenburg Thalmann & Co. Inc., as sales agents (the “Agents”), pursuant to which the Company may, from time to time, issue and sell shares of its common stock, par value \$0.001 per share, in an aggregate offering price of up to \$75.0 million (the “Shares”).

Under the terms of the Agreement, the Agents may sell the Shares at market prices by any method that is deemed to be an “at the market offering” as defined in Rule 415 under the Securities Act, as amended.

The offer and sales of the Shares made pursuant to the Agreement, if any, will be made under the Company’s effective “shelf” registration statement on Form S-3 (File No. 333-233038), the base prospectus contained therein, dated August 13, 2019, and a prospectus supplement related to the offering of the Shares, dated August 30, 2019.

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

The Company is not obligated to, and it cannot provide any assurances that it will, make any sales of the Shares under the Agreement. The Agreement may be terminated by the Agents or the Company at any time upon ten days’ prior written notice to the Company or the Agents, respectively. The Company will pay the Agents a commission rate of up to 3.0% of the gross sales price per share of any Shares sold through the Agents as sales agents under the Agreement. The Company has also provided the Agents with customary indemnification and contribution rights. The Company has agreed to reimburse the Agents for legal fees and disbursements, not to exceed \$50,000 in the aggregate.

The foregoing description of the Agreement is not complete and is qualified in its entirety by reference to the full text of such agreement, a copy of which was filed as Exhibit 10.1 hereto and incorporated herein by reference.

The legal opinion of Pepper Hamilton LLP, counsel to the Company, relating to the Shares is filed as Exhibit 5.1 hereto.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers

On August 30, 2019, the Company entered into amendments (the “Amendments”) to the employment agreements with each of (i) Armando Anido, its Chief Executive Officer, (ii) Terri Sebree, its President, and (iii) James Fickenscher, its Chief Financial Officer, Vice President, Corporate Development (together, the “Executives”) to, among other things, change from “single-trigger” to “double-trigger” change of control severance benefits.

Under each Executive’s existing employment agreement with the Company, the Executive was entitled to certain “single-trigger” severance benefits, which include base salary continuation and medical and dental insurance continuation (“Severance Benefits”) in connection with a Change of Control (as defined in each respective employment agreement) of the Company, pursuant to which the Executive is entitled to such Severance Benefits in the event of his or her (i) resignation within thirty days of a Change of Control (as defined in each respective employment agreement) or (ii) termination without Cause or resignation for Good Reason within the ninety day period preceding a Change of Control or on or within twelve months following a Change of Control.

As amended by the Amendments, each employment agreement now provides for “double-trigger” Severance Benefits in connection with a Change of Control, pursuant to which such Executive is entitled to such Severance Benefits in the event of his or her termination without Cause or resignation for Good Reason

within the ninety day period preceding a Change of Control or on or within twelve months following a Change of Control. The definition of “Good Reason” in each employment agreement is amended to remove the consummation of a Change of Control of the Company as constituting good reason with respect to any termination of employment by the employee. “Good Reason,” as amended, includes: (i) a material reduction in the employee’s duties and responsibilities, which includes assignment to the employee of any duties or responsibilities that are materially inconsistent with or adverse to the employee’s then current duties, responsibilities, positions and/or titles with the employer; (ii) a material reduction of the employee’s then-current base salary or target bonus opportunity; (iii) the requirement that the employee regularly report to work at a location that is more than fifty miles from the location of the employee’s employment as of the effective date of the employment agreement; (iv) a material breach of the employment agreement; and (v) the failure of an assignee or successor entity to agree to be bound by the terms of the employment agreement.

The Amendments also extend the Severance Benefits payable to each Executive for a period of six additional months in the event of his or her termination without Cause or resignation for Good Reason within the ninety day period preceding a Change of Control or on or within twelve months following a Change of Control, and, accordingly, pursuant to the Amendments, Messrs. Anido and Fickenscher and Miss Sebree would be entitled to twenty-four (24) months, eighteen (18) months and eighteen (18) months, respectively, of the Severance Benefits.

All other material terms and conditions of each Executive’s respective existing employment agreement will continue in full force and effect.

The foregoing description of the Amendments to Messrs. Anido and Fickenscher and Miss Sebree’s employment agreements is qualified in its entirety by the full text of the Amendments, which are attached hereto as Exhibits 10.2, 10.3 and 10.4, respectively, and incorporated by reference herein.

Item 9.01 Financial Statements and Exhibits

The following exhibit is being filed herewith:

(d) Exhibits

Exhibit No.	Document
5.1	<u>Opinion of Pepper Hamilton LLP</u>
10.1	<u>Controlled Equity OfferingSM Sales Agreement, dated August 30, 2019, by and among Zynerba Pharmaceuticals, Inc., Cantor Fitzgerald & Co., Canaccord Genuity LLC, H.C. Wainwright & Co. LLC and Ladenburg Thalmann & Co. Inc.</u>
10.2	<u>Amendment to Employment Agreement, dated August 30, 2019, by and between Zynerba Pharmaceuticals, Inc. and Armando Anido</u>
10.3	<u>Amendment to Employment Agreement, dated August 30, 2019, by and between Zynerba Pharmaceuticals, Inc. and James E. Fickenscher</u>
10.4	<u>Amendment to Employment Agreement, dated August 30, 2019, by and between Zynerba Pharmaceuticals, Inc. and Terri B. Sebree</u>
23.1	<u>Consent of Pepper Hamilton LLP (included in Exhibit 5.1)</u>

SIGNATURE

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.

Date: August 30, 2019

ZYNERBA PHARMACEUTICALS, INC.

By: /s/ Suzanne Hanlon

Name: Suzanne Hanlon

Title: Secretary, Vice President and General Counsel



3000 Two Logan Square
 Eighteenth and Arch Streets
 Philadelphia, PA 19103-2799
 215.981.4000
 Fax 215.981.4750

August 30, 2019

Board of Directors
 Zynerva Pharmaceuticals, Inc.
 80 W. Lancaster Avenue, Suite 300
 Devon, PA 19333

Ladies and Gentlemen:

We are acting as counsel to Zynerva Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), in connection with the sale and issuance from time to time of up to \$75,000,000 of the Company’s common stock, par value \$0.001 per share (the “**Shares**”), pursuant to the Company’s effective registration statement on Form S-3 (File No. 333-233038) (the “**Registration Statement**”) under the Securities Act of 1933, as amended (the “**Act**”), filed with the Securities and Exchange Commission (the “**Commission**”) on August 6, 2019, as declared effective by the Commission on August 13, 2019, a base prospectus dated August 13, 2019 (the “**Base Prospectus**”), and a prospectus supplement dated August 30, 2019, (together with the Base Prospectus, the “**Prospectus**”). The Shares are being sold pursuant to the terms of the Sales Agreement, dated August 30, 2019 (the “**Agreement**”), by and among the Company, Cantor Fitzgerald & Co., Canaccord Genuity LLC, H.C. Wainwright & Co., LLC and Ladenburg Thalmann & Co. Inc.

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 telecopies). 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.

Based upon, subject to and limited by the foregoing, we are of the opinion that following (i) issuance of the Shares pursuant to the terms of the Agreement, and (ii) 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 filing by the Company of a Current Report on Form 8-K relating to the offer and sale of the Shares, which Form 8-K will be incorporated by

Philadelphia	Boston	Washington, D.C.	Los Angeles	New York	Pittsburgh
Detroit	Berwyn	Harrisburg	Orange County	Silicon Valley	Wilmington

www.pepperlaw.com

Zynerba Pharmaceuticals, Inc.
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reference into the Registration Statement and Prospectus, and speaks as of the date hereof. We assume no obligation to advise you of any changes in the foregoing subsequent to the delivery of this letter.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the above-described Form 8-K and to the reference to this firm under the caption "Legal Matters" in the Prospectus. In giving this consent, we do not thereby admit that we are an "expert" within the meaning of the Act.

Very truly yours,

/s/ Pepper Hamilton LLP
Pepper Hamilton LLP

Zynerba Pharmaceuticals, Inc.

Shares of Common Stock
(par value \$0.001 per share)

Controlled Equity OfferingSM

Sales Agreement

August 30, 2019

Cantor Fitzgerald & Co.
499 Park Avenue
New York, NY 10022

Canaccord Genuity LLC
99 High Street, Suite 1200
Boston, Massachusetts 02110

H.C. Wainwright & Co., LLC
430 Park Avenue
New York, New York 10022

Ladenburg Thalmann & Co. Inc.
277 Park Avenue, 26th Floor
New York, New York 10172

Ladies and Gentlemen:

Zynerba Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), confirms its agreement (this "**Agreement**") with Cantor Fitzgerald & Co., Canaccord Genuity LLC, H.C. Wainwright & Co., LLC and Ladenburg Thalmann & Co. Inc. (each, an "**Agent**," and collectively, the "**Agents**"), as follows:

1. **Issuance and Sale of Shares.** The Company agrees that, from time to time during the term of this Agreement, on the terms and subject to the conditions set forth herein, it may issue and sell through one or more of the Agents, shares of common stock (the "**Placement Shares**") of the Company, par value \$0.001 per share (the "**Common Stock**"); *provided, however*, that in no event shall the Company issue or sell through the Agents such number or dollar amount of Placement Shares that would (a) exceed the number or dollar amount of shares of Common Stock registered on the effective Registration Statement (defined below) pursuant to which the offering is being made, (b) exceed the number of authorized but unissued shares of Common Stock (less shares of Common Stock issuable upon the exercise, conversion or exchange of any outstanding securities of the Company or otherwise reserved from the Company's authorized capital stock), (c) exceed the number or dollar amount of shares of Common Stock permitted to be sold under Form S-3 (including General Instruction I.B.6 thereof, if applicable) or (d) exceed the number or dollar amount of shares of Common Stock for which the Company has filed a Prospectus Supplement (defined below) (the lesser of (a), (b), (c) and

(d), the “**Maximum Amount**”). Notwithstanding anything to the contrary contained herein, the parties hereto agree that compliance with the limitations set forth in this **Section 1** on the amount of Placement Shares issued and sold under this Agreement shall be the sole responsibility of the Company and that the Agents shall have no obligation in connection with such compliance. The offer and sale of Placement Shares through the Agents will be effected pursuant to the Registration Statement (as defined below) filed by the Company and declared effective by the Securities and Exchange Commission (the “**Commission**”) on August 13, 2019, although nothing in this Agreement shall be construed as requiring the Company to use the Registration Statement to issue Common Stock.

The Company has filed, in accordance with the provisions of the Securities Act of 1933, as amended (the “**Securities Act**”) and the rules and regulations thereunder (the “**Securities Act Regulations**”), with the Commission a registration statement on Form S-3 (File No. 333-233038), including a base prospectus, relating to certain securities, including the Placement Shares to be issued from time to time by the Company, and which incorporates by reference documents that the Company has filed or will file in accordance with the provisions of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and the rules and regulations thereunder. The Company has prepared a prospectus supplement to the base prospectus included as part of the registration statement, which prospectus supplement relates to the Placement Shares to be issued from time to time by the Company (the “**Prospectus Supplement**”). The Company will furnish to the Agents, for use by the Agents, copies of the prospectus included as part of such registration statement, as supplemented by the Prospectus Supplement, relating to the Placement Shares to be issued from time to time by the Company. The Company may file one or more additional registration statements from time to time that will contain a base prospectus and related prospectus or prospectus supplement, if applicable (which shall be a Prospectus Supplement), with respect to the Placement Shares. Except where the context otherwise requires, such registration statement(s), including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus (as defined below) subsequently filed with the Commission pursuant to Rule 424(b) under the Securities Act Regulations or deemed to be a part of such registration statement pursuant to Rule 430B of the Securities Act Regulations, is herein called the “**Registration Statement**.” The base prospectus or base prospectuses, including all documents incorporated therein by reference, included in the Registration Statement, as it may be supplemented, if necessary, by the Prospectus Supplement, in the form in which such prospectus or prospectuses and/or Prospectus Supplement have most recently been filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act Regulations, together with the then issued Issuer Free Writing Prospectus(es) (as defined below), is herein called the “**Prospectus**.”

Any reference herein to the Registration Statement, any Prospectus Supplement, Prospectus or any Issuer Free Writing Prospectus (defined below) shall be deemed to refer to and include the documents, if any, incorporated by reference therein (the “**Incorporated Documents**”), including, unless the context otherwise requires, the documents, if any, filed as exhibits to such Incorporated Documents. Any reference herein to the terms “amend,” “amendment” or “supplement” with respect to the Registration Statement, any Prospectus Supplement, the Prospectus or any Issuer Free Writing Prospectus shall be deemed to refer to and include the filing of any document under the Exchange Act on or after the most-recent effective date of the Registration Statement, or the date of the Prospectus Supplement,

Prospectus or such Issuer Free Writing Prospectus, as the case may be, and incorporated therein by reference. For purposes of this Agreement, all references to the Registration Statement, the Prospectus or to any amendment or supplement thereto shall be deemed to include the most recent copy filed with the Commission pursuant to its Electronic Data Gathering Analysis and Retrieval system, or if applicable, the Interactive Data Electronic Application system when used by the Commission (collectively, “**EDGAR**”).

2. **Placements.** Each time that the Company wishes to issue and sell Placement Shares hereunder (each, a “**Placement**”), it will notify an Agent (the “**Designated Agent**”) by email notice (or other method mutually agreed to by the parties) of the number of Placement Shares to be issued, the time period during which sales are requested to be made, any limitation on the number of Placement Shares that may be sold in any one Trading Day (as defined below) and any minimum price below which sales may not be made (a “**Placement Notice**”), the form of which is attached hereto as Schedule 1. The Placement Notice shall originate from any of the individuals from the Company set forth on Schedule 3, and shall be addressed to each of the individuals from the Designated Agent set forth on Schedule 3, as such Schedule 3 may be amended from time to time. The Placement Notice shall be effective immediately upon receipt by the Designated Agent unless and until (i) the Designated Agent declines to accept the terms contained therein for any reason, in its sole discretion, (ii) the entire amount of the Placement Shares thereunder have been sold, (iii) the Company suspends or terminates the Placement Notice for any reason in its sole discretion, (iv) the Company delivers a subsequent Placement Notice with parameters superseding those on the earlier dated Placement Notice or (v) this Agreement has been terminated under the provisions of Section 12. The amount of any discount, commission or other compensation to be paid by the Company to the Designated Agent in connection with the sale of the Placement Shares shall be calculated in accordance with the terms set forth in Schedule 2. It is expressly acknowledged and agreed that neither the Company nor the Designated Agent will have any obligation whatsoever with respect to a Placement or any Placement Shares unless and until the Company delivers a Placement Notice to the Designated Agent and the Designated Agent does not decline such Placement Notice pursuant to the terms set forth above, and then only upon the terms specified therein and herein. In the event of a conflict between the terms of this Agreement and the terms of a Placement Notice, the terms of the Placement Notice will control.

3. **Sale of Placement Shares by the Designated Agent.** Subject to the provisions of Section 5(a), the Designated Agent, for the period specified in the Placement Notice, will use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of the Nasdaq Global Market (the “**Exchange**”), to sell the Placement Shares up to the amount specified, and otherwise in accordance with the terms of such Placement Notice. The Designated Agent will provide written confirmation to the Company no later than the opening of the Trading Day (as defined below) immediately following the Trading Day on which it has made sales of Placement Shares hereunder setting forth the number of Placement Shares sold on such day, the compensation payable by the Company to the Designated Agent pursuant to Section 2 with respect to such sales, and the Net Proceeds (as defined below) payable to the Company, with an itemization of the deductions made by the Designated Agent (as set forth in Section 5(b)) from the gross proceeds that it receives from such sales. Subject to the terms of the Placement Notice, the Designated Agent may sell Placement Shares by any method permitted by law deemed to be an

“at the market offering” as defined in Rule 415(a)(4) of the Securities Act Regulations, including sales made directly on or through the Exchange or any other existing trading market for the Common Stock, in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices and/or any other method permitted by law. “**Trading Day**” means any day on which Common Stock is traded on the Exchange.

4. **Suspension of Sales.** The Company or the Designated Agent may, upon notice to the other party in writing (including by email correspondence to each of the individuals of the other party set forth on Schedule 3, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) or by telephone (confirmed immediately by verifiable facsimile transmission or email correspondence to each of the individuals of the other party set forth on Schedule 3), suspend any sale of Placement Shares (a “**Suspension**”); *provided, however*, that such Suspension shall not affect or impair any party’s obligations with respect to any Placement Shares sold hereunder prior to the receipt of such notice. While a Suspension is in effect any obligation under Sections 7(l), 7(m), and 7(n) with respect to the delivery of certificates, opinions, or comfort letters to the Agents, shall be waived. Each of the parties agrees that no such notice under this Section 4 shall be effective against any other party unless it is made to one of the individuals named on Schedule 3 hereto, as such Schedule may be amended from time to time. Notwithstanding any other provision of this Agreement, during any period in which the Company is in possession of material non-public information, the Company and the Agents agree that (i) no sale of Placement Shares will take place, (ii) the Company shall not request the sale of any Placement Shares, and (iii) the Agents shall not be obligated to sell or offer to sell any Placement Shares.

5. **Sale and Delivery to the Designated Agent; Settlement.**

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

(b) **Settlement of Placement Shares.** Unless otherwise specified in the applicable Placement Notice, settlement for sales of Placement Shares will occur on the second (2nd) Trading Day (or such earlier day as is industry practice for regular-way trading) following the date on which such sales are made (each, a “**Settlement Date**”). The Designated Agent shall

notify the Company of each sale of Placement Shares no later than the opening of the Trading Day immediately following the Trading Day on which it has made sales of Placement Shares hereunder. The amount of proceeds to be delivered to the Company on a Settlement Date against receipt of the Placement Shares sold (the "**Net Proceeds**") will be equal to the aggregate sales price received by the Designated Agent, after deduction for (i) the Designated Agent's commission, discount or other compensation for such sales payable by the Company pursuant to Section 2 hereof, and (ii) any transaction fees imposed by any Governmental Authority in respect of such sales.

(c) Delivery of Placement Shares. On or before each Settlement Date, the Company will, or will cause its transfer agent to, electronically transfer the Placement Shares being sold by crediting the Designated Agent's or its designee's account (provided the Designated Agent shall have given the Company written notice of such designee at least one Trading Day prior to the Settlement Date) at The Depository Trust Company through its Deposit and Withdrawal at Custodian System or by such other means of delivery as may be mutually agreed upon by the parties hereto which in all cases shall be freely tradable, transferable, registered shares in good deliverable form. On each Settlement Date, the Designated Agent will deliver the related Net Proceeds in same day funds to an account designated by the Company on, or prior to, the Settlement Date. The Designated Agent will be responsible for providing the instructions for delivery with regard to the issuance of the Placement Shares being sold. The Company agrees that if the Company (other than as a result of failure by the Designated Agent to provide instructions for delivery), or its transfer agent (if applicable), defaults in its obligation to deliver Placement Shares on a Settlement Date, the Company agrees that in addition to and in no way limiting the rights and obligations set forth in Section 10(a) hereto, it will (i) hold the Designated Agent harmless against any loss, claim, damage, or reasonable and documented expense (including reasonable and documented legal fees and expenses of its outside counsel), as incurred, arising out of or in connection with such default by the Company or its transfer agent (if applicable) and (ii) pay to the Designated Agent (without duplication) any commission, discount, or other compensation to which it would otherwise have been entitled absent such default.

(d) Denominations; Registration. Certificates for the Placement Shares, if any, shall be in such denominations and registered in such names as the Designated Agent may request in writing at least one full Business Day (as defined below) before the Settlement Date. The certificates for the Placement Shares, if any, will be made available by the Company for examination and packaging by the Designated Agent in The City of New York not later than noon (New York time) on the Business Day prior to the Settlement Date.

(e) Limitations on Offering Size. Under no circumstances shall the Company cause or request the offer or sale of any Placement Shares if, after giving effect to the sale of such Placement Shares, the aggregate gross sales proceeds of Placement Shares sold pursuant to this Agreement would exceed the lesser of (A) together with all sales of Placement Shares under this Agreement, the Maximum Amount and (B) the amount authorized from time to time to be issued and sold under this Agreement by the Company's board of directors, a duly authorized committee thereof or a duly authorized executive committee, and notified to the Designated Agent in writing. Under no circumstances shall the Company cause or request the offer or sale of any Placement Shares pursuant to this Agreement at a price lower than the minimum price

authorized from time to time by the Company's board of directors, a duly authorized committee thereof or a duly authorized executive committee. Further, under no circumstances shall the Company cause or permit the aggregate offering amount of Placement Shares sold pursuant to this Agreement to exceed the Maximum Amount.

(f) Sales Through Agents. With respect to the offering and sale of Placement Shares pursuant to this Agreement, the Company agrees that under no circumstances will it issue a Placement Notice to any Designated Agent in which the selling period under such Placement Notice includes any dates in which a Placement Notice issued to any other Designated Agent is in effect and that any offer to sell Placement Shares, any solicitation of an offer to buy Placement Shares, and any sales of Placement Shares shall only be effected by or through the Designated Agent on any single given day.

6. Representations and Warranties of the Company. The Company represents and warrants to, and agrees with each Agent that as of the date of this Agreement and as of each Applicable Time (as defined below):

(a) Registration Statement and Prospectus. The Company and the transactions contemplated by this Agreement meet the requirements for and comply with the applicable conditions set forth in Form S-3 (including General Instructions I.A and I.B) under the Securities Act. The Registration Statement has been filed with the Commission and has been declared effective by the Commission under the Securities Act. The Prospectus Supplement will name the Agents as the agents in the section entitled "Plan of Distribution." The Company has not received, and has no notice of, any order of the Commission preventing or suspending the use of the Registration Statement, or threatening or instituting proceedings for that purpose. The Registration Statement and the offer and sale of Placement Shares as contemplated hereby meet the requirements of Rule 415 under the Securities Act and comply in all material respects with said Rule. Any statutes, regulations, contracts or other documents that are required to be described in the Registration Statement or the Prospectus or to be filed as exhibits to the Registration Statement have been so described or filed. Copies of the Registration Statement, the Prospectus, and any such amendments or supplements and all documents incorporated by reference therein that were filed with the Commission on or prior to the date of this Agreement have been delivered, or are available through EDGAR, to the Agents and their counsel. The Company has not distributed and, prior to the later to occur of each Settlement Date and completion of the distribution of the Placement Shares, will not distribute any offering material in connection with the offering or sale of the Placement Shares other than the Registration Statement and the Prospectus and any Issuer Free Writing Prospectus (as defined below) to which the Agents have consented. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and is currently listed on the Exchange under the trading symbol "ZYNE." 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, delisting the Common Stock from the Exchange, nor has the Company received any notification that the Commission or the Exchange is contemplating terminating such registration or listing. To the Company's knowledge, it is in compliance with all applicable listing requirements of the Exchange.

(b) No Misstatement or Omission. The Registration Statement, when it became or becomes effective, and the Prospectus, and any amendment or supplement thereto, on the date of such Prospectus or amendment or supplement, conformed and will conform in all

material respects with the requirements of the Securities Act. At each Settlement Date, the Registration Statement and the Prospectus, as of such date, will conform in all material respects with the requirements of the Securities Act. The Registration Statement, when it became or becomes effective, did not, and will not, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Prospectus and any amendment and supplement thereto, on the date thereof and at each Applicable Time (defined below), did not or will not include an 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 documents incorporated by reference in the Prospectus or any Prospectus Supplement did not, and any further documents filed and incorporated by reference therein will not, when filed with the Commission, contain an untrue statement of a material fact or omit to state a material fact required to be stated in such document or necessary to make the statements in such document, in light of the circumstances under which they were made, not misleading. The foregoing shall not apply to statements in, or omissions from, any such document made in reliance upon, and in conformity with, information furnished to the Company by any of the Agents specifically for use in the preparation thereof.

(c) Conformity with Securities Act and Exchange Act. The Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or any amendment or supplement thereto, and the documents incorporated by reference in the Registration Statement, the Prospectus or any amendment or supplement thereto, when such documents were or are filed with the Commission under the Securities Act or the Exchange Act or became or become effective under the Securities Act, as the case may be, conformed or will conform in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable.

(d) Financial Information. The consolidated financial statements of the Company included or incorporated by reference in the Registration Statement, the Prospectus and the Issuer Free Writing Prospectuses, if any, together with the related notes and schedules, present fairly, in all material respects, the consolidated financial position of the Company and the Subsidiaries (as defined below) as of the dates indicated and the consolidated results of operations, cash flows and changes in stockholders' equity of the Company for the periods specified and have been prepared in compliance with the requirements of the Securities Act and Exchange Act and in conformity with generally accepted accounting principles ("GAAP") applied on a consistent basis during the periods involved, except as may be expressly stated in the related notes thereto; the other financial and statistical data with respect to the Company and the Subsidiaries (as defined below) contained or incorporated by reference in the Registration Statement, the Prospectus and the Issuer Free Writing Prospectuses, if any, are accurately and fairly presented, in all material respects, and prepared on a basis consistent with the financial statements and books and records of the Company; there are no financial statements (historical or pro forma) that are required to be included or incorporated by reference in the Registration Statement, or the Prospectus that are not included or incorporated by reference as required; since the date of the most recent financial statements of the Company included or incorporated by reference in the Registration Statement or the Prospectus, the Company and the Subsidiaries, considered as one entity, have not incurred any material liabilities or obligations, direct or contingent (including any off-balance sheet obligations), outside the ordinary course of business, not described in the Registration Statement and the Prospectus; and all disclosures contained or incorporated by reference in the Registration Statement, the Prospectus and the Issuer Free

Writing Prospectuses, if any, regarding “non-GAAP financial measures” (as such term is defined by the rules and regulations of the Commission) comply with Regulation G of the Exchange Act and Item 10 of Regulation S-K under the Securities Act, to the extent applicable. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement and the Prospectus fairly presents the information called for in all material respects and has been prepared in accordance with the Commission’s rules and guidelines applicable thereto.

(e) Conformity with EDGAR Filing. The Prospectus delivered to the Agents for use in connection with the sale of the Placement Shares pursuant to this Agreement will be identical to the version of the Prospectus created to be transmitted to the Commission for filing via EDGAR, except to the extent permitted by Regulation S-T.

(f) Organization. The Company and each of its Subsidiaries have been duly organized and are validly existing as a corporation and in good standing under the laws of their respective jurisdictions of organization. The Company and each of its Subsidiaries are duly licensed or qualified as a foreign corporation for transaction of business and in good standing under the laws of each other jurisdiction in which their respective ownership or lease of property or the conduct of their respective businesses requires such license or qualification, and have all corporate power and authority necessary to own or hold their respective properties and to conduct their respective businesses as described in the Registration Statement and the Prospectus, except where the failure to be so qualified or in good standing or have such power or authority would not, individually or in the aggregate, have a material adverse effect or would reasonably be expected to have a material adverse effect on the assets, business, operations, earnings, properties, condition (financial or otherwise), prospects, stockholders’ equity or results of operations of the Company and the Subsidiaries taken as a whole, or prevent or materially interfere with consummation of the transactions contemplated hereby (a “Material Adverse Effect”).

(g) Subsidiaries. The subsidiaries set forth on Schedule 4 (collectively, the “Subsidiaries”), are the Company’s only significant subsidiaries (as such term is defined in Rule 1-02 of Regulation S-X promulgated by the Commission). Except as set forth in the Registration Statement and in the Prospectus, the Company owns, directly or indirectly, all of the equity interests of the Subsidiaries free and clear of any security interest, mortgage, pledge, lien, encumbrance or adverse claim, and all the equity interests of the Subsidiaries are validly issued and are fully paid, nonassessable and free of preemptive and similar rights.

(h) No Violation or Default. Neither the Company nor any of its Subsidiaries is (i) in violation of its charter or by-laws or similar organizational documents; (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries is bound or to which any of the property or assets of the Company or any of its Subsidiaries are subject; or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any Governmental Authority, except, in the case of each of clauses (ii) and (iii) above, for any such violation or default that would not, individually or in the aggregate, have a Material Adverse Effect.

(i) No Material Adverse Change. Subsequent to the respective dates as of which information is given in the Registration Statement, the Prospectus and the Free Writing Prospectuses, if any (including any document deemed incorporated by reference therein), there has not been (i) any Material Adverse Effect or the occurrence of any development that the Company reasonably expects will result in a Material Adverse Effect, (ii) any transaction which is material to the Company and the Subsidiaries taken as a whole, (iii) any obligation or liability, direct or contingent (including any off-balance sheet obligations), incurred by the Company or any Subsidiary, which is material to the Company and the Subsidiaries taken as a whole, (iv) any material change in the capital stock or outstanding long-term indebtedness of the Company or any of its Subsidiaries or (v) any dividend or distribution of any kind declared, paid or made on the capital stock of the Company or any Subsidiary, other than in each case above in the ordinary course of business or as otherwise disclosed in the Registration Statement or Prospectus (including any document deemed incorporated by reference therein).

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

(k) Authorization; Enforceability. The Company has full legal right, power and authority to enter into this Agreement and perform the transactions contemplated hereby. This Agreement has been duly authorized, executed and delivered by the Company and is a legal, valid and binding agreement of the Company enforceable in accordance with its terms, except to the extent that enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general equitable principles.

(l) Authorization of Placement Shares. The Placement Shares, when issued and delivered pursuant to the terms approved by the board of directors of the Company or a duly authorized committee thereof, or a duly authorized executive committee, against payment therefor as provided herein, will be duly and validly authorized and issued and fully paid and nonassessable and the issuance and delivery of the Placement Shares is not subject to any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase the Placement Shares. Upon their issuance and delivery, the Placement Shares will be registered

pursuant to Section 12 of the Exchange Act. The Placement Shares, when issued, will conform to the description thereof set forth in or incorporated into the Prospectus.

(m) No Consents Required. No consent, approval, authorization, order, registration or qualification of or with any Governmental Authority is required for the execution, delivery and performance by the Company of this Agreement, and the issuance and sale by the Company of the Placement Shares, except for such consents, approvals, authorizations, orders and registrations or qualifications as may be required under applicable state securities laws or by the by-laws and rules of the Financial Industry Regulatory Authority ("FINRA") or the Exchange in connection with the sale of the Placement Shares by the Agents.

(n) No Preferential Rights. (i) No person, as such term is defined in Rule 1-02 of Regulation S-X promulgated under the Securities Act (each, a "Person"), has the right, contractual or otherwise, to cause the Company to issue or sell to such Person any Common Stock or shares of any other capital stock or other securities of the Company, (ii) no Person has any preemptive rights, resale rights, rights of first refusal, rights of co-sale, or any other rights (whether pursuant to a "poison pill" provision or otherwise) to purchase any Common Stock or shares of any other capital stock or other securities of the Company, (iii) no Person has the right to act as an underwriter or as a financial advisor to the Company in connection with the offer and sale of the Common Stock, and (iv) no Person has the right, contractual or otherwise, to require the Company to register under the Securities Act any Common Stock or shares of any other capital stock or other securities of the Company, or to include any such shares or other securities in the Registration Statement or the offering contemplated thereby, whether as a result of the filing or effectiveness of the Registration Statement or the sale of the Placement Shares as contemplated thereby or otherwise.

(o) Independent Public Accounting Firm. KPMG LLP (the "Accountant"), whose report on the consolidated financial statements of the Company is filed with the Commission as part of the Company's most recent Annual Report on Form 10-K filed with the Commission and incorporated by reference into the Registration Statement and the Prospectus, is and, during the periods covered by its report, was an independent registered public accounting firm within the meaning of the Securities Act and the Public Company Accounting Oversight Board (United States). To the Company's knowledge, the Accountant is not in violation of the auditor independence requirements of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") with respect to the Company.

(p) No Litigation. There are no actions, suits or proceedings by or before any Governmental Authority pending, nor, to the Company's knowledge, any audits or investigations by or before any Governmental Authority to which the Company or a Subsidiary is a party or to which any property of the Company or any of its Subsidiaries is the subject that, individually or in the aggregate, would have a Material Adverse Effect and, to the Company's knowledge, no such actions, suits, proceedings, audits or investigations are threatened or contemplated by any Governmental Authority or threatened by others; and there are no contracts or other documents that are required under the Securities Act to be filed as exhibits to the Registration Statement that are not so filed.

(q) Consents and Permits. 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 in the Registration Statement or the Prospectus (“**Permits**”), except where the failure to so possess would not reasonably be expected to, individually or in the aggregate, result in a Material Adverse Effect. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, 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 certificate, authorization or permit.

(r) **Regulatory Filings.** Neither the Company nor any of its Subsidiaries has failed to file with the applicable Governmental Authorities (including, without limitation, the FDA, or any foreign, federal, state, provincial or local Governmental Authority performing functions similar to those performed by the FDA) any required filing, declaration, listing, registration, report or submission, except for such failures that, individually or in the aggregate, would not have a Material Adverse Effect; except as disclosed in the Registration Statement and the Prospectus, all such filings, declarations, listings, registrations, reports or submissions were in compliance with applicable laws when filed and no deficiencies have been asserted by any applicable regulatory authority with respect to any such filings, declarations, listings, registrations, reports or submissions, except for any deficiencies that, individually or in the aggregate, would not have a Material Adverse Effect. The Company has operated and currently is, in all material respects, in compliance with the United States Federal Food, Drug, and Cosmetic Act, all applicable rules and regulations of the FDA and other federal, state, local and foreign Governmental Authorities exercising comparable authority.

(s) **Intellectual Property.** The Company and its Subsidiaries own, possess, license or have other rights to use all foreign and domestic patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, Internet domain names, know-how and other intellectual property (collectively, the “**Intellectual Property**”), necessary for the conduct of their respective businesses as now conducted except to the extent that the failure to own, possess, license or otherwise hold adequate rights to use such Intellectual Property would not, individually or in the aggregate, have a Material Adverse Effect. To the Company’s knowledge and except as would not reasonably be expected to, individually or in the aggregate, have a Material Adverse Effect, other than as disclosed in the Registration Statement and the Prospectus (i) there are no rights of third parties to any such Intellectual Property owned by the Company and its Subsidiaries; (ii) there is no infringement by third parties of any such Intellectual Property. Except as would not be reasonably expected, individually or in the aggregate, to have a Material Adverse Effect, there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others (A) challenging the Company’s and its Subsidiaries’ rights in or to any such Intellectual Property, and the Company is unaware of any facts which could form a reasonable basis for any such action, suit, proceeding or claim; (B) challenging the validity or scope of any such Intellectual Property, and the Company is unaware of any facts that would form a reasonable basis for any such action, suit, proceeding or claim; or (C) that the Company and its Subsidiaries infringe or otherwise violate any patent, trademark, copyright, trade secret or other proprietary rights of others, and the Company is unaware of any facts which could form a reasonable basis for any such action, suit, proceeding or claim. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Company and its

Subsidiaries have complied with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company or such Subsidiary, and all such agreements are in full force and effect.

(t) Clinical Studies. The preclinical studies and tests and clinical trials described in the Prospectus were, and, if still pending, are being conducted in all material respects in accordance with the experimental protocols, procedures and controls pursuant to, where applicable, accepted professional and scientific standards for products or product candidates comparable to those being developed by the Company; the descriptions of such studies, tests and trials, and the results thereof, contained in the Prospectus are accurate and complete in all material respects; the Company is not aware of any tests, studies or trials not described in the Prospectus, the results of which reasonably call into question the results of the tests, studies and trials described in the Prospectus; and the Company has not received any written notice or correspondence from the FDA or any foreign, state or local Governmental Authority exercising comparable authority or any institutional review board or comparable authority requiring the termination, suspension, clinical hold or material modification of any tests, studies or trials.

(u) Market Capitalization. At the time the Registration Statement was originally declared effective, and at the time the Company's most recent Annual Report on Form 10-K was filed with the Commission, the Company met the then applicable requirements for the use of Form S-3 under the Securities Act, including, but not limited to, General Instruction I.B.1 of Form S-3.

(v) No Material Defaults. Neither the Company nor any of the Subsidiaries has defaulted on any installment on indebtedness for borrowed money or on any rental on one or more long-term leases, which defaults, individually or in the aggregate, would have a Material Adverse Effect.

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

(x) Taxes. The Company and each of its Subsidiaries have filed all federal, state, local and foreign tax returns which have been required to be filed and paid all taxes shown thereon through the date hereof, to the extent that such taxes have become due and are not being contested in good faith, except where the failure to so file or pay would not reasonably be expected to have a have a Material Adverse Effect. Except as otherwise disclosed in or contemplated by the Registration Statement or the Prospectus, no tax deficiency has been determined adversely to the Company or any of its Subsidiaries which has had, or would have, individually or in the aggregate, a Material Adverse Effect.

(y) Title to Real and Personal Property. The Company and its subsidiaries do not own any real property. Except as set forth in the Registration Statement or the Prospectus, the Company and its Subsidiaries have good and marketable title to all personal property

described in the Registration Statement or Prospectus as being owned by them, in each case free and clear of all liens, encumbrances and claims, except those matters that would not (i) be reasonably expected to materially interfere with the use made and proposed to be made of such property by the Company and any of its Subsidiaries or (ii) would not, individually or in the aggregate, have a Material Adverse Effect. Any real or personal property described in the Registration Statement or Prospectus as being leased by the Company and any of its Subsidiaries is held by them 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.

(z) Environmental Laws. Except as set forth in the Registration Statement or the Prospectus, the Company and its Subsidiaries (i) are in compliance with any and all applicable federal, state, local and foreign laws, rules, regulations, decisions and orders relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (collectively, "Environmental Laws"); (ii) have received and are in compliance with all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses as described in the Registration Statement and the Prospectus; and (iii) have not received notice of any actual or potential liability for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, except, in the case of any of clauses (i), (ii) or (iii) above, for any such failure to comply or failure to receive required permits, licenses, other approvals or liability as would not be really expected to, individually or in the aggregate, have a Material Adverse Effect.

(aa) Disclosure Controls. 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. The Company is not aware of any change in its 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.

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

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

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

(dd) Labor Disputes. No labor disturbance by or dispute with employees of the Company or any of its Subsidiaries exists or, to the knowledge of the Company, is threatened which would result in a Material Adverse Effect.

(ee) Investment Company Act. Neither the Company nor any of the Subsidiaries is or, after giving effect to the offering and sale of the Placement Shares, will be an “investment company” or an entity “controlled” by an “investment company,” as such terms are defined in the Investment Company Act of 1940, as amended (the “Investment Company Act”).

(ff) Operations. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial record keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions to which the Company or its Subsidiaries are subject, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Authority (collectively, the “Money Laundering Laws”); and no action, suit or proceeding by or before any Governmental Authority 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.

(gg) Underwriter Agreements. The Company is not a party to any agreement with an agent or underwriter for any other “at the market” or continuous equity transaction.

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

these purposes accrued but unpaid contributions) exceeds the present value of all benefits accrued under such plan determined using reasonable actuarial assumptions.

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

(jj) Agent Purchases. The Company acknowledges and agrees that the Agents have informed the Company that the Agents may, to the extent permitted under the Securities Act and the Exchange Act, purchase and sell Common Stock for their own account while this Agreement is in effect, *provided*, that (i) no such purchase or sales shall take place while a Placement Notice is in effect (except to the extent the Agents may engage in sales of Placement Shares purchased or deemed purchased from the Company as a “riskless principal” or in a similar capacity) and (ii) the Company shall not be deemed to have authorized or consented to any such purchases or sales by the Agents.

(kk) Insurance. The Company and each of its Subsidiaries carry, or are covered by, insurance in such amounts and covering such risks as the Company and each of its Subsidiaries reasonably believe are adequate for the conduct of their business and as is customary for companies engaged in similar businesses in similar industries.

(ll) No Improper Practices. Neither the Company nor any Subsidiary 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 law or of the character required to be disclosed in the Registration Statement or the Prospectus.

(mm) Foreign Corrupt Practices Act. Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries 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 any direct or indirect unlawful payment 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 employee from corporate funds; (iii) violated or is in violation of any provision of the FCPA or any applicable non-U.S. anti-bribery statute or regulation; or (iv) made any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any domestic government official, such foreign official or employee; and the Company and its subsidiaries and, to the knowledge of the Company, the Company’s affiliates have conducted their respective businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(nn) Status Under the Securities Act. The Company was not and is not an ineligible issuer as defined in Rule 405 under the Securities Act at the times specified in Rules 164 and 433 under the Securities Act in connection with the offering of the Placement Shares.

(oo) No Misstatement or Omission in an Issuer Free Writing Prospectus. Each Issuer Free Writing Prospectus, as of its issue date and as of each Applicable Time (as defined in Section 23 below), did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement or the Prospectus, including any incorporated document deemed to be a part thereof that has not been superseded or modified. The foregoing sentence does not apply to statements in or omissions from any Issuer Free Writing Prospectus based upon and in conformity with written information furnished to the Company by the Agents specifically for use therein.

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

(qq) Sanctions. (i) Neither the Company nor any of its Subsidiaries nor to the knowledge of the Company, after due inquiry, any director, officer, employee, agent, affiliate or representative of any of them, is a government, individual, or entity (in this paragraph (qq), "Person") that is, or is owned or controlled by a Person that is:

(A) the subject of any sanctions administered or enforced by the U.S. Department of Treasury's Office of Foreign Assets Control ("OFAC"), the United Nations Security Council, the European Union, Her Majesty's Treasury, or other relevant sanctions authorities, including, without limitation, designation on OFAC's Specially Designated Nationals and Blocked Persons List or OFAC's Foreign Sanctions Evaders List (as amended, collectively, "Sanctions"), nor

(B) located, organized or resident in a country or territory that is the subject of Sanctions that broadly prohibit dealings with that country or territory (including, without limitation, Cuba, Iran, North Korea, Sudan, Syria and the Crimea Region of the Ukraine).

(ii) The Company and its Subsidiaries will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person or entity for the purpose of financing the activities of or business with any person, or in any country or territory, that currently is the subject to any U.S. sanctions administered by OFAC or 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 U.S. sanctions administered by OFAC.

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

(ss) Compliance with Laws. 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 could not be expected, individually or in the aggregate, to have a Material Adverse Effect.

(tt) Statistical and Market-Related Data. The statistical, demographic and market-related data included in the Registration Statement and Prospectus are based on or derived from sources that the Company believes to be reliable and accurate.

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

(vv) Emerging Growth Company Status. From the time of filing of the Company's first registration statement with the Commission through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "Emerging Growth Company").

Any certificate signed by an officer of the Company and delivered to the Agents or to counsel for the Agents pursuant to or in connection with this Agreement shall be deemed to be a representation and warranty by the Company, as applicable, to the Agents as to the matters set forth therein.

7. Covenants of the Company. The Company covenants and agrees with each Agent that:

(a) Registration Statement Amendments. After the date of this Agreement and during any period in which a Prospectus relating to any Placement Shares is required to be delivered by the Agents under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act or similar rule),

(i) the Company will notify the Agents promptly of the time when any subsequent amendment to the Registration Statement, other than documents incorporated by reference, has been filed with the Commission and/or has become effective or any subsequent supplement to the Prospectus has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus or for additional information, (ii) the Company will prepare and file with the Commission, promptly upon the Agents' reasonable request, any amendments or supplements to the Registration Statement or Prospectus that, in the Agents' reasonable opinion, with the advice of counsel, may be necessary or advisable in connection with the distribution of the Placement Shares by the Agents (*provided, however*, that the failure of the Agents to make such request shall not relieve the Company of any obligation or liability hereunder, or affect the Agents' right to rely on the representations and warranties made by the Company in this Agreement and *provided, further*, that the only remedy the Agents shall have with respect to the failure to make such filing shall be to cease making sales under this Agreement until such amendment or supplement is filed); (iii) the Company will not file any amendment or supplement to the Registration Statement or Prospectus relating to the Placement Shares or a security convertible into the Placement Shares unless a copy thereof has been submitted to the Agents within a reasonable period of time before the filing and the Agents have not objected thereto within two (2) Trading Days (*provided, however*, that (A) the failure of the Agents to make such objection shall not relieve the Company of any obligation or liability hereunder, or affect the Agents' right to rely on the representations and warranties made by the Company in this Agreement and (B) the Company has no obligation to provide the Agents any advance copy of such filing or to provide the Agents an opportunity to object to such filing if such filing does not name the Agents or does not relate to the Placement Shares or the transactions contemplated hereunder, and *provided, further*, that the only remedy the Agents shall have with respect to the failure by the Company to obtain such consent shall be to cease making sales under this Agreement) and the Company will furnish to the Agents at the time of filing thereof a copy of any document that upon filing is deemed to be incorporated by reference into the Registration Statement or Prospectus, except for those documents available via EDGAR; and (iv) the Company will cause each amendment or supplement to the Prospectus to be filed with the Commission as required pursuant to the applicable paragraph of Rule 424(b) of the Securities Act or, in the case of any document to be incorporated therein by reference, to be filed with the Commission as required pursuant to the Exchange Act, within the time period prescribed (the determination to file or not file any amendment or supplement with the Commission under this Section 7(a), based on the Company's reasonable opinion or reasonable objections, shall be made exclusively by the Company).

(b) Notice of Commission Stop Orders. The Company will advise the Agents, promptly after it receives notice or obtains knowledge thereof, of the issuance or threatened issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, of the suspension of the qualification of the Placement Shares for offering or sale in any jurisdiction, or of the initiation or threatening of any proceeding for any such purpose; and it will promptly use its commercially reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued. The Company will advise the Agents promptly after it receives any request by the Commission for any amendments to the Registration Statement or any amendment or supplements to the Prospectus or any Issuer Free Writing Prospectus or for additional information related to the offering of the Placement Shares

or for additional information related to the Registration Statement, the Prospectus or any Issuer Free Writing Prospectus.

(c) Delivery of Prospectus; Subsequent Changes. During any period in which a Prospectus relating to the Placement Shares is required to be delivered by the Agents under the Securities Act with respect to the offer and sale of the Placement Shares, (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act or similar rule), the Company will comply in all material respects with all requirements imposed upon it by the Securities Act, as from time to time in force, and to file on or before their respective due dates all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14, 15(d) or any other provision of or under the Exchange Act. If the Company has omitted any information from the Registration Statement pursuant to Rule 430B under the Securities Act, it will use its commercially reasonable efforts to comply with the provisions of and make all requisite filings with the Commission pursuant to said Rule 430B and to notify the Agents promptly of all such filings. If during such period any event occurs as a result of which the Prospectus as then amended or supplemented 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 to amend or supplement the Registration Statement or Prospectus to comply with the Securities Act, the Company will promptly notify the Agents to suspend the offering of Placement Shares during such period and the Company will promptly amend or supplement the Registration Statement or Prospectus (at the expense of the Company) so as to correct such statement or omission or effect such compliance; *provided, however*, that the Company may delay any such amendment or supplement if, in the reasonable judgement of the Company, it is in the best interests of the Company to do so.

(d) Listing of Placement Shares. Prior to the date of the first Placement Notice, the Company will use its reasonable best efforts to cause the Placement Shares to be listed on the Exchange.

(e) Delivery of Registration Statement and Prospectus. The Company will furnish to the Agents and their counsel (at the expense of the Company) a reasonable number of copies of the Registration Statement, the Prospectus (including all documents incorporated by reference therein) and all amendments and supplements to the Registration Statement or Prospectus that are filed with the Commission during any period in which a Prospectus relating to the Placement Shares is required to be delivered under the Securities Act (including all documents filed with the Commission during such period that are deemed to be incorporated by reference therein), in each case as soon as reasonably practicable and in such quantities as the Agents may from time to time reasonably request and, at the Agents' request, will also furnish copies of the Prospectus to each exchange or market on which sales of the Placement Shares may be made; *provided, however*, that the Company shall not be required to furnish any document (other than the Prospectus) to the Agents to the extent such document is available on EDGAR.

(f) Earning Statement. The Company will make generally available to its security holders, as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earning statement covering a 12-month period that satisfies the provisions of Section 11(a) and Rule 158 of the Securities Act.

(g) Use of Proceeds. The Company will use the Net Proceeds as described in the Prospectus in the section entitled “Use of Proceeds.”

(h) Notice of Other Sales. Without the prior written consent of the Agents, the Company will not, directly or indirectly, offer to sell, sell, contract to sell, grant any option to sell or otherwise dispose of any Common Stock (other than the Placement Shares offered pursuant to this Agreement) or securities convertible into or exchangeable for Common Stock, warrants or any rights to purchase or acquire, Common Stock during the period beginning on the fifth (5th) Trading Day immediately prior to the date on which any Placement Notice is delivered to the Agents hereunder and ending on the fifth (5th) Trading Day immediately following the final Settlement Date with respect to Placement Shares sold pursuant to such Placement Notice (or, if the Placement Notice has been terminated or suspended prior to the sale of all Placement Shares covered by a Placement Notice, the date of such suspension or termination); and will not directly or indirectly in any other “at the market” or continuous equity transaction offer to sell, sell, contract to sell, grant any option to sell or otherwise dispose of any Common Stock (other than the Placement Shares offered pursuant to this Agreement) or securities convertible into or exchangeable for Common Stock, warrants or any rights to purchase or acquire, Common Stock prior to the sixtieth (60th) day immediately following termination of this Agreement; *provided, however*, that such restrictions will not be required in connection with the Company’s issuance or sale of (i) Common Stock, options to purchase Common Stock, other equity awards to acquire Common Stock or Common Stock issuable upon the exercise or vesting of options or other equity awards, pursuant to any employee or director stock option or benefits plan, stock ownership plan or dividend reinvestment plan (but not Common Stock subject to a waiver to exceed plan limits in its dividend reinvestment plan) of the Company whether now in effect or hereafter implemented, (ii) Common Stock issuable upon conversion of securities or the exercise of warrants, options or other rights in effect or outstanding and the vesting of restricted stock units, and disclosed in filings by the Company available on EDGAR or otherwise in writing to the Agents, and (iii) Common Stock or securities convertible into or exchangeable for shares of Common Stock as consideration for mergers, acquisitions, other business combinations or strategic alliances occurring after the date of this Agreement which are not issued for capital raising purposes.

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

(j) Due Diligence Cooperation. The Company will cooperate with any reasonable due diligence review conducted by the Agents or their representatives in connection with the transactions contemplated hereby, including, without limitation, providing information and making available documents and senior corporate officers, during regular business hours and at the Company’s principal offices, as the Agents may reasonably request.

(k) Required Filings Relating to Placement of Placement Shares. The Company agrees that on such dates as the Securities Act shall require, the Company will (i) file a prospectus supplement with the Commission under the applicable paragraph of Rule 424(b) under the Securities Act, which prospectus supplement will set forth, within the relevant period,

the amount of Placement Shares sold through the Agents, the Net Proceeds to the Company and the compensation payable by the Company to the Agents with respect to such Placement Shares, and (ii) deliver such number of copies of each such prospectus supplement to each exchange or market on which such sales were effected as may be required by the rules or regulations of such exchange or market.

(l) Representation Dates: Certificate. (1) Prior to the date of the first Placement Notice and (2) each time the Company:

(i) files the Prospectus relating to the Placement Shares or amends or supplements (other than a prospectus supplement relating solely to an offering of securities other than the Placement Shares) the Registration Statement or the Prospectus relating to the Placement Shares by means of a post-effective amendment, sticker, or supplement but not by means of incorporation of documents by reference into the Registration Statement or the Prospectus relating to the Placement Shares;

(ii) files an annual report on Form 10-K under the Exchange Act (including any Form 10-K/A containing amended financial information or a material amendment to the previously filed Form 10-K);

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

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

the Company shall furnish the Agents (but in the case of clause (iv) above only if an Agent reasonably determines that the information contained in such Form 8-K is material) with a certificate dated the Representation Date, in the form and substance satisfactory to the Agents and their counsel, substantially similar to the form previously provided to the Agents and their counsel, modified, as necessary, to relate to the Registration Statement and the Prospectus as amended or supplemented. The requirement to provide a certificate under this Section 7(l) shall be waived without an action on the part of the Agents or the Company for any Representation Date occurring at a time at which no Placement Notice is pending (including, for the purposes of clarity, during which a Suspension is in effect), which waiver shall continue until the earlier to occur of the date the Company delivers a Placement Notice hereunder or instructions for the sale of Placement Shares under a suspended Placement Notice (which for such calendar quarter shall be considered a Representation Date) and the next occurring Representation Date. Notwithstanding the foregoing, if the Company subsequently decides to sell Placement Shares following a Representation Date when the Company relied on such waiver and did not provide the Agents with a certificate under this Section 7(l), then before the Company delivers the instructions for the sale of Placement Shares or any of the Agents sell any Placement Shares pursuant to such instructions, the Company shall provide the Agents with a certificate in

conformity with this Section 7(l) dated as of the date of the Placement Notice or the date that the instructions for the sale of Placement Shares are issued, as applicable.

(m) Legal Opinion. (1) Prior to the date of the first Placement Notice and (2) within five (5) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate pursuant to Section 7(l) for which no waiver is applicable and excluding the date of this Agreement, the Company shall cause to be furnished to the Agents a written opinion of each of Pepper Hamilton LLP (“**Company Counsel**”), and Womble Bond Dickinson (US) LLP (“**IP Counsel**”) or other counsel reasonably satisfactory to the Agent, in form and substance satisfactory to the Agents and their counsel, substantially similar to the form previously provided to the Agents and their counsel, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented; *provided, however*, the Company shall be required to furnish to the Agents no more than one opinion from each of Company Counsel and IP Counsel hereunder per calendar quarter; *provided, further*, that in lieu of such opinions for subsequent periodic filings under the Exchange Act, counsel may furnish the Agents with a letter (a “**Reliance Letter**”) to the effect that the Agents may rely on a prior opinion delivered under this Section 7(m) to the same extent as if it were dated the date of such letter (except that statements in such prior opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended or supplemented as of the date of the Reliance Letter).

(n) Comfort Letter. (1) Prior to the date of the first Placement Notice and (2) within five (5) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate pursuant to Section 7(l) for which no waiver is applicable and excluding the date of this Agreement, the Company shall cause its independent registered public accounting firm to furnish the Agents letters (the “**Comfort Letters**”), dated the date the Comfort Letter is delivered, which shall meet the requirements set forth in this Section 7(n); *provided*, that if requested by an Agent, the Company shall cause a Comfort Letter to be furnished to the Agents within ten (10) Trading Days of the date of occurrence of any material transaction or event requiring the filing of a current report on Form 8-K containing material financial statements, including the restatement of the Company’s financial statements. The Comfort Letter from the Company’s independent registered public accounting firm shall be in a form and substance reasonably satisfactory to the Agents, (i) confirming that they are an independent registered public accounting firm within the meaning of the Securities Act and the PCAOB, (ii) stating, as of such date, the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants’ “comfort letters” to underwriters in connection with registered public offerings (the first such letter, the “**Initial Comfort Letter**”) and (iii) updating the Initial Comfort Letter with any information that would have been included in the Initial Comfort Letter had it been given on such date and modified as necessary to relate to the Registration Statement and the Prospectus, as amended and supplemented to the date of such letter.

(o) Market Activities. The Company will not, directly or indirectly, without giving effect to the activities of the Agents (i) take any action designed to cause or result in, or that constitutes or would reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of Common Stock in violation of the Exchange Act, or the rules and regulations thereunder, or the Securities Act or the Securities Act Regulations or (ii) sell, bid for, or purchase Common Stock in violation of

Regulation M, or pay anyone any compensation for soliciting purchases of the Placement Shares other than the Agents.

(p) Investment Company Act. The Company will conduct its affairs in such a manner so as to reasonably ensure that neither it nor any of its Subsidiaries will be or become, at any time prior to the termination of this Agreement, required to register as an “investment company,” as such term is defined in the Investment Company Act.

(q) No Offer to Sell. Other than an Issuer Free Writing Prospectus approved in advance by the Company and the Agents in their capacity as agents hereunder (such approval by the Agents not to be unreasonably conditioned, delayed or withheld), neither the Agents nor the Company (including its agents and representatives, other than the Agents in their capacity as such) will make, use, prepare, authorize, approve or refer to any written communication (as defined in Rule 405 under the Securities Act), required to be filed with the Commission, that constitutes an offer to sell or solicitation of an offer to buy Placement Shares hereunder.

(r) Blue Sky and Other Qualifications. The Company will use its commercially reasonable efforts, in cooperation with the Agents, to qualify the Placement Shares for offering and sale, or to obtain an exemption for the Placement Shares to be offered and sold, under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Agents may designate and to maintain such qualifications and exemptions in effect for so long as required for the distribution of the Placement Shares (but in no event for less than one year from the date of this Agreement); *provided, however*, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject. In each jurisdiction in which the Placement Shares have been so qualified or exempt, the Company will file such statements and reports as may be required by the laws of such jurisdiction to continue such qualification or exemption, as the case may be, in effect for so long as required for the distribution of the Placement Shares (but in no event for less than one year from the date of this Agreement).

(s) Sarbanes-Oxley Act. The Company and its Subsidiaries will maintain and keep accurate books and records reflecting their assets and maintain internal accounting controls in a manner designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP and including those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company, (ii) provide reasonable assurance that transactions are recorded as necessary to permit the preparation of the Company’s consolidated financial statements in accordance with GAAP, (iii) that receipts and expenditures of the Company are being made only in accordance with management’s and the Company’s directors’ authorization, and (iv) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company’s assets that could have a material effect on its financial statements. The Company and the 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 ensure 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 ensure 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 principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure and to ensure that material information relating to the Company or the Subsidiaries is made known to them by others within those entities, particularly during the period in which such periodic reports are being prepared.

(t) Secretary's Certificate: Further Documentation. Prior to the date of the first Placement Notice, the Company shall deliver to the Agents a certificate of the Secretary of the Company and attested to by an executive officer of the Company, dated as of such date, certifying as to (i) the Certificate of Incorporation of the Company, (ii) the By-laws of the Company, (iii) the resolutions of the Board of Directors of the Company authorizing the execution, delivery and performance of this Agreement and the issuance of the Placement Shares and (iv) the incumbency of the officers duly authorized to execute this Agreement and the other documents contemplated by this Agreement. Within five (5) Trading Days of each Representation Date, the Company shall have furnished to the Agents such further information, certificates and documents as the Agents may reasonably request.

(u) Emerging Growth Company Status. The Company will promptly notify the Agents if the Company ceases to be an Emerging Growth Company at any time during the term of this Agreement, other than if the Company loses its status as an Emerging Growth Company due to the passage of time since the Company's initial public offering.

8. Payment of Expenses. The Company will pay all expenses incident to the performance of its obligations under this Agreement, including (i) the preparation and filing of the Registration Statement, including any fees required by the Commission, and the printing or electronic delivery of the Prospectus as originally filed and of each amendment and supplement thereto, in such number as the Agents shall deem necessary, (ii) the printing and delivery to the Agents of this Agreement and such other documents as may be reasonably required in connection with the offering, purchase, sale, issuance or delivery of the Placement Shares, (iii) the preparation, issuance and delivery of the certificates, if any, for the Placement Shares to the Agents, including any stock or other transfer taxes and any capital duties, stamp duties or other duties or taxes payable upon the sale, issuance or delivery of the Placement Shares to the Agents, (iv) the fees and disbursements of the counsel, accountants and other advisors to the Company, (v) the reasonable fees and expenses of the Agents including but not limited to the reasonable and documented fees and expenses of the counsel to the Agents, payable upon the execution of this Agreement, in an amount not to exceed \$50,000 in the aggregate, (vi) the qualification or exemption of the Placement Shares under state securities laws in accordance with the provisions of Section 7(r) hereof, including filing fees, but excluding fees of the Agents' counsel, (vii) the printing and delivery to the Agents of copies of any Permitted Issuer Free Writing Prospectus and the Prospectus and any amendments or supplements thereto in such number as the Agents shall reasonably deem necessary, (viii) the preparation, printing and delivery to the Agents of copies of the blue sky survey, (ix) the fees and expenses of the transfer agent and registrar for the Common Stock, (x) the filing and other fees incident to any review by

FINRA of the terms of the sale of the Placement Shares including the fees of the Agents' counsel (subject to the cap, set forth in clause (v) above), and (xi) the fees and expenses incurred in connection with the listing of the Placement Shares on the Exchange.

9. Conditions to the Agents' Obligations. The obligations of the Agents hereunder with respect to a Placement will be subject to the continuing accuracy and completeness of the representations and warranties made by the Company herein, to the due performance by the Company of its obligations hereunder, to the completion by the Agents of a due diligence review satisfactory to them in their reasonable judgment, and to the continuing satisfaction (or waiver by the Agents in their sole discretion) of the following additional conditions:

(a) Registration Statement Effective. The Registration Statement shall have become effective and shall be available for the (i) resale of all Placement Shares issued to the Agents and not yet sold by the Agents and (ii) sale of all Placement Shares contemplated to be issued by any Placement Notice.

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

(c) No Misstatement or Material Omission. The Agents shall not have advised the Company that the Registration Statement or Prospectus, or any amendment or supplement thereto, contains an untrue statement of fact that in the Agents' reasonable opinion is material, or omits to state a fact that in the Agents' reasonable opinion is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(d) Material Changes. Except as contemplated in the Prospectus, or disclosed in the Company's reports filed with the Commission, there shall not have been any material adverse change in the authorized capital stock of the Company or any Material Adverse Effect or any development that would reasonably be expected to result in a Material Adverse Effect, or a

downgrading in or withdrawal of the rating assigned to any of the Company's securities (other than asset backed securities) by any credit rating organization or a public announcement by any credit rating organization that it has under surveillance or review its rating of any of the Company's securities (other than asset backed securities), the effect of which, in the case of any such action by a rating organization described above, in the reasonable judgment of the Agents (without relieving the Company of any obligation or liability it may otherwise have), is so material as to make it impracticable or inadvisable to proceed with the offering of the Placement Shares on the terms and in the manner contemplated in the Prospectus.

(e) Legal Opinions. The Agents shall have received the opinions of Company Counsel and IP Counsel required to be delivered pursuant to Section 7(m) on or before the date on which such delivery of such opinions is required pursuant to Section 7(m).

(f) Comfort Letter. The Agents shall have received the Comfort Letter required to be delivered pursuant to Section 7(n) on or before the date on which such delivery of such Comfort Letter is required pursuant to Section 7(n).

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

(h) No Suspension. Trading in the Common Stock shall not have been suspended on the Exchange and the Common Stock shall not have been delisted from the Exchange.

(i) Other Materials. On each date on which the Company is required to deliver a certificate pursuant to Section 7(l), the Company shall have furnished to the Agents such appropriate further information, opinions, certificates, letters and other documents as the Agents may reasonably request. All such opinions, certificates, letters and other documents will be in compliance with the provisions hereof.

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

(k) Approval for Listing. The Placement Shares shall either have been (i) approved for listing on the Exchange, subject only to notice of issuance, or (ii) the Company shall have filed an application for listing of the Placement Shares on the Exchange at, or prior to, the issuance of any Placement Notice and the Exchange shall have reviewed such application and not provided any objections thereto.

(l) FINRA. If applicable, FINRA shall have raised no objection to the terms of this offering and the amount of compensation allowable or payable to the Agents as described in the Prospectus.

(m) No Termination Event. There shall not have occurred any event that would permit the Agents to terminate this Agreement pursuant to Section 12(b).

10. Indemnification and Contribution.

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

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, joint or several, arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading, or arising out of any untrue statement or alleged untrue statement of a material fact included in any related Issuer Free Writing Prospectus or the Prospectus (or any amendment or supplement thereto), or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, joint or several, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any Governmental Authority, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; *provided* that (subject to Section 10(d) below) any such settlement is effected with the written consent of the Company, which consent shall not unreasonably be delayed or withheld; and

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

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

(b) Agent Indemnification. Each Agent agrees, severally but not jointly, to indemnify and hold harmless the Company and its directors and each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act against any and all loss, liability, claim, damage and expense described in the indemnity contained in Section 10(a), as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendments thereto), the Prospectus (or any amendment or supplement thereto) or any Issuer Free Writing Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with information relating to such Agent and furnished to the Company in writing by such Agent expressly for use

therein. The Company hereby acknowledges that the only information that the Agents have furnished to the Company expressly for use in the Registration Statement, the Prospectus or any Issuer Free Writing Prospectus (or any amendment or supplement thereto) are the statements set forth in the seventh and eighth paragraphs under the caption "Plan of Distribution" in the Prospectus (the "**Agent Information**").

(c) Procedure. Any party that proposes to assert the right to be indemnified under this Section 10 will, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 10, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it might have to any indemnified party otherwise than under this Section 10 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 10 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any other legal expenses except as provided below and except for the reasonable and documented costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party) or (4) the indemnifying party has not in fact employed counsel to assume the defense of such action or counsel reasonably satisfactory to the indemnified party, in each case, within a reasonable time after receiving notice of the commencement of the action; in each of which cases the reasonable and documented fees, disbursements and other charges of outside counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable and documented fees, disbursements and other charges of more than one separate firm (plus local counsel) admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such fees, disbursements and other charges will be reimbursed by the indemnifying party promptly after the indemnifying party receives a written invoice relating to the fees, disbursements and other charges in reasonable detail. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent (which consent shall not be unreasonably withheld,

conditioned or delayed). No indemnifying party shall, without the prior written consent of each indemnified party (which consent shall not be unreasonably conditioned, withheld or delayed), settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 10 (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent (1) includes an express and unconditional release of each indemnified party, in form and substance reasonably satisfactory to such indemnified party, from all liability arising out of such litigation, investigation, proceeding or claim and (2) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) Settlement Without Consent if Failure to Reimburse. If an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for reasonable fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 10(a)(ii) effected without its written consent if (1) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (2) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (3) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

(e) Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this Section 10 is applicable in accordance with its terms but for any reason is held to be unavailable or insufficient from the Company or an Agent, the Company and such Agent will contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted) to which the Company and the Agents may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and the Agents on the other hand. The relative benefits received by the Company on the one hand and the Agents on the other hand shall be deemed to be in the same proportion as the total net proceeds from the sale of the Placement Shares (before deducting expenses) received by the Company bear to the total compensation received by the Agents from the sale of Placement Shares on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and such Agent, on the other hand, with respect to the statements or omission that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or such Agent, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and each Agent agree that it would not be just and equitable if contributions pursuant to this Section 10(e) were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss,

claim, liability, expense, or damage, or action in respect thereof, referred to above in this Section 10(e) shall be deemed to include, for the purpose of this Section 10(e), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with Section 10(c) hereof. Notwithstanding the foregoing provisions of this Section 10(e), no Agent shall be required to contribute any amount in excess of the commissions received by such Agent under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 10(e), any person who controls a party to this Agreement within the meaning of the Securities Act, any affiliates of the Agents and any officers, directors, partners, employees or agents of the Agents or any of its affiliates, will have the same rights to contribution as that party, and each director of the Company and each officer of the Company who signed the Registration Statement will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 10(e), will notify any such party or parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 10(e) except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 10(c) hereof, no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 10(c) hereof. The Agents' respective obligations to contribute pursuant to this Section 10(e) are several in proportion to the respective number of Placement Shares they have sold hereunder, and not joint.

11. Representations and Agreements to Survive Delivery. The indemnity and contribution agreements contained in Section 10 of this Agreement and all representations and warranties of the Company herein or in certificates delivered pursuant hereto shall survive, as of their respective dates, regardless of (i) any investigation made by or on behalf of any Agent, any controlling persons, or the Company (or any of their respective officers, directors, employees or controlling persons), (ii) delivery and acceptance of the Placement Shares and payment therefor or (iii) any termination of this Agreement.

12. Termination.

(a) Subject to the provisions of this Section 12, the term of this Agreement shall continue from the date of this Agreement until the earlier to occur of (a) the third anniversary of the date of this Agreement or (b) the date on which the Agents have sold the Maximum Amount pursuant to this Agreement (the "**Term**"), unless earlier terminated by the parties to this Agreement pursuant to this Section 12.

(b) Each of the Agents may terminate this Agreement prior to the end of the Term, with respect to its rights and obligations under this Agreement, by notice to the Company, as hereinafter specified at any time (1) if there has been, since the time of execution of this Agreement or since the date as of which information is given in the Prospectus, any change, or any development or event involving a prospective change, in the condition, financial or

otherwise, or in the business, properties, earnings, results of operations or prospects of the Company and its Subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, which individually or in the aggregate, in the sole judgment of such Agent is material and adverse and makes it impractical or inadvisable to market the Placement Shares or to enforce contracts for the sale of the Placement Shares, (2) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Agent, impracticable or inadvisable to market the Placement Shares or to enforce contracts for the sale of the Placement Shares, (3) if trading in the Common Stock has been suspended or limited by the Commission or the Exchange, or if trading generally on the Exchange has been suspended or limited, or minimum prices for trading have been fixed on the Exchange, (4) if any suspension of trading of any securities of the Company on any exchange or in the over-the-counter market shall have occurred and be continuing, (5) if a major disruption of securities settlements or clearance services in the United States shall have occurred and be continuing, or (6) if a banking moratorium has been declared by either U.S. Federal or New York authorities. Any such termination shall be without liability of any party to any other party except that the provisions of Section 8 (Payment of Expenses), Section 10 (Indemnification and Contribution), Section 11 (Representations and Agreements to Survive Delivery), Section 17 (Governing Law and Time; Waiver of Jury Trial) and Section 18 (Consent to Jurisdiction) hereof shall remain in full force and effect notwithstanding such termination. If any Agent elects to terminate this Agreement as provided in this Section 12(b), such Agent shall provide the required notice as specified in Section 13 (Notices). For the avoidance of doubt, the termination by one Agent of its rights and obligations under this Agreement pursuant to this Section 12(b) shall not affect the rights and obligations of the other Agents under this Agreement.

(c) The Company shall have the right, by giving ten (10) days' notice as hereinafter specified to terminate this Agreement with respect to one or more Agents in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other relevant party except that the provisions of Section 8, Section 10, Section 11, Section 17 and Section 18 hereof shall remain in full force and effect notwithstanding such termination. For the avoidance of doubt, the termination by the Company of this Agreement with respect to one Agent pursuant to this Section 12(c) shall not affect the rights and obligations of the other Agents under this Agreement.

(d) Each of the Agents shall have the right, by giving ten (10) days' notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other relevant party except that the provisions of Section 8, Section 10, Section 11, Section 17 and Section 18 hereof shall remain in full force and effect notwithstanding such termination. For the avoidance of doubt, the termination by one Agent of its rights and obligations under this Agreement pursuant to this Section 12(d) shall not affect the rights and obligations of the other Agents under this Agreement.

(e) This Agreement shall remain in full force and effect during the Term unless terminated pursuant to Sections 12(b), (c), or (d) above or otherwise by mutual agreement

of the parties; *provided, however*, that any such termination by mutual agreement shall in all cases be deemed to provide that Section 8, Section 10, Section 11, Section 17 and Section 18 shall remain in full force and effect. Upon termination of this Agreement, the Company shall not have any liability to an Agent for any discount, commission or other compensation with respect to any Placement Shares not otherwise sold by an Agent under this Agreement.

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

13. Notices. All notices or other communications required or permitted to be given by any party to any other party pursuant to the terms of this Agreement shall be in writing, unless otherwise specified, and if sent to the Agents, shall be delivered to:

Cantor Fitzgerald & Co.
499 Park Avenue
New York, NY 10022
Attention: Capital Markets
Facsimile: (212) 307-3730

and:

Cantor Fitzgerald & Co.
499 Park Avenue
New York, NY 10022
Attention: General Counsel
Facsimile: (212) 829-4708

and:

Canaccord Genuity LLC
99 High Street, Suite 1200
Boston, Massachusetts 02110
Attention: General Counsel

and:

H.C. Wainwright & Co., LLC
430 Park Avenue
New York, New York 10022
Attention: Head of Investment Banking

and:

Ladenburg Thalmann & Co. Inc.
277 Park Avenue, 26th Floor
New York, New York 10172
Attention: Head of Investment Banking

with a copy to:

Covington & Burling LLP
New York Times Building
620 Eighth Avenue
New York, NY 10018
Attention: Donald Murray
Facsimile: (646) 441-9101

and if to the Company, shall be delivered to:

Zynerba Pharmaceuticals, Inc.
80 W. Lancaster Avenue, Suite 300
Devon, Pennsylvania 19333
Attention: Suzanne M. Hanlon

with a copy to:

Pepper Hamilton LLP
3000 Two Logan Square
Philadelphia, PA 19103
Attention: Rachael M. Bushey, Esq.
Facsimile: (215) 981-4750

Each party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose. Each such notice or other communication shall be deemed given (i) when delivered personally or by verifiable facsimile transmission (with an original to follow) on or before 4:30 p.m., New York City time, on a Business Day or, if such day is not a Business Day, on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier and (iii) on the Business Day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid). For purposes of this Agreement, "**Business Day**" shall mean any day on which the Exchange and commercial banks in the City of New York are open for business.

An electronic communication ("**Electronic Notice**") shall be deemed written notice for purposes of this Section 13 if sent to the electronic mail address specified by the receiving party under separate cover. Electronic Notice shall be deemed received at the time the party sending Electronic Notice receives verification of receipt by the receiving party. Any party receiving Electronic Notice may request and shall be entitled to receive the notice on paper, in a nonelectronic form ("**Nonelectronic Notice**") which shall be sent to the requesting party within ten (10) days of receipt of the written request for Nonelectronic Notice.

14. **Successors and Assigns.** This Agreement shall inure to the benefit of and be binding upon the Company and the Agents and their respective successors and the parties referred to in Section 10 hereof. References to any of the parties contained in this Agreement shall be deemed to include the successors and permitted assigns of such party. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. Neither party may assign its rights or obligations under this Agreement without the prior written consent of the other party; *provided, however*, that an Agent may assign its rights and obligations hereunder to an affiliate thereof without obtaining the Company's consent, so long as such affiliate is a registered broker dealer.

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

16. **Entire Agreement; Amendment; Severability; Waiver.** This Agreement (including all schedules and exhibits attached hereto and Placement Notices issued pursuant hereto) constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties hereto with regard to the

subject matter hereof. Neither this Agreement nor any term hereof may be amended except pursuant to a written instrument executed by the Company and each Agent. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable as written by a court of competent jurisdiction, then such provision shall be given full force and effect to the fullest possible extent that it is valid, legal and enforceable, and the remainder of the terms and provisions herein shall be construed as if such invalid, illegal or unenforceable term or provision was not contained herein, but only to the extent that giving effect to such provision and the remainder of the terms and provisions hereof shall be in accordance with the intent of the parties as reflected in this Agreement. No implied waiver by a party shall arise in the absence of a waiver in writing signed by such party. No failure or delay in exercising any right, power, or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any right, power, or privilege hereunder.

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

18. **CONSENT TO JURISDICTION.** EACH PARTY HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE CITY OF NEW YORK, BOROUGH OF MANHATTAN, FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH ANY TRANSACTION CONTEMPLATED HEREBY, AND HEREBY IRREVOCABLY WAIVES, AND AGREES NOT TO ASSERT IN ANY SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT, THAT SUCH SUIT, ACTION OR PROCEEDING IS BROUGHT IN AN INCONVENIENT FORUM OR THAT THE VENUE OF SUCH SUIT, ACTION OR PROCEEDING IS IMPROPER. EACH PARTY HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH SUIT, ACTION OR PROCEEDING BY MAILING A COPY THEREOF (CERTIFIED OR REGISTERED MAIL, RETURN RECEIPT REQUESTED) TO SUCH PARTY AT THE ADDRESS IN EFFECT FOR NOTICES TO IT UNDER THIS AGREEMENT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW.

19. **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the

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

20. Construction. The section and exhibit headings herein are for convenience only and shall not affect the construction hereof. References herein to any law, statute, ordinance, code, regulation, rule or other requirement of any Governmental Authority shall be deemed to refer to such law, statute, ordinance, code, regulation, rule or other requirement of any Governmental Authority as amended, reenacted, supplemented or superseded in whole or in part and in effect from time to time and also to all rules and regulations promulgated thereunder.

21. Permitted Free Writing Prospectuses. The Company represents, warrants and agrees that, unless it obtains the prior written consent of each of the Agents, and each of the Agents represents, warrants and agrees that, unless they obtain the prior written consent of the Company and the other Agents, it has not made and will not make any offer relating to the Placement Shares that would constitute an Issuer Free Writing Prospectus, or that would otherwise constitute a “free writing prospectus,” as defined in Rule 405, required to be filed with the Commission. Any such free writing prospectus consented to by the Agents or by the Company, as the case may be, is hereinafter referred to as a “Permitted Free Writing Prospectus.” The Company represents and warrants that it has treated and agrees that it will treat each Permitted Free Writing Prospectus as an “issuer free writing prospectus,” as defined in Rule 433, and has complied and will comply with the requirements of Rule 433 applicable to any Permitted Free Writing Prospectus, including timely filing with the Commission where required, legending and record keeping. For the purposes of clarity, the parties hereto agree that all free writing prospectuses, if any, listed in Exhibit 21 hereto are Permitted Free Writing Prospectuses.

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

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

(b) it is capable of evaluating and understanding, and understands and accepts, the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) neither the Agents nor their respective affiliates have provided any legal, accounting, regulatory or tax advice with respect to the transactions contemplated by this Agreement and it has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate;

(d) it is aware that each Agent and its respective affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and such Agent and its respective affiliates have no obligation to disclose such interests and

transactions to the Company by virtue of any fiduciary, advisory or agency relationship or otherwise; and

(e) it waives, to the fullest extent permitted by law, any claims it may have against an Agent or its affiliates for breach of fiduciary duty or alleged breach of fiduciary duty in connection with the sale of Placement Shares under this Agreement and agrees that such Agent and its respective affiliates shall not have any liability (whether direct or indirect, in contract, tort or otherwise) to it in respect of such a fiduciary duty claim or to any person asserting a fiduciary duty claim on its behalf or in right of it or the Company, employees or creditors of the Company.

23. **Definitions.** As used in this Agreement, the following terms have the respective meanings set forth below:

“Applicable Time” means (i) each Representation Date, (ii) the time of each sale of any Placement Shares pursuant to this Agreement and (iii) each Settlement Date.

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

“Issuer Free Writing Prospectus” means any “issuer free writing prospectus,” as defined in Rule 433, relating to the Placement Shares that (1) is required to be filed with the Commission by the Company, (2) is a “road show” that is a “written communication” within the meaning of Rule 433(d)(8) (i) whether or not required to be filed with the Commission, or (3) is exempt from filing pursuant to Rule 433(d)(5)(i) because it contains a description of the Placement Shares or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g) under the Securities Act Regulations.

“Rule 172,” “Rule 405,” “Rule 415,” “Rule 424,” “Rule 424(b),” “Rule 430B,” and **“Rule 433”** refer to such rules under the Securities Act Regulations.

All references in this Agreement to financial statements and schedules and other information that is “contained,” “included” or “stated” in the Registration Statement or the Prospectus (and all other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information that is incorporated by reference in the Registration Statement or the Prospectus, as the case may be.

All references in this Agreement to the Registration Statement, 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 EDGAR; all references in this Agreement to any Issuer Free Writing Prospectus (other than any Issuer Free Writing Prospectuses that, pursuant to Rule 433, are not required to be filed with the Commission) shall be deemed to include the copy thereof filed with the Commission pursuant to EDGAR; and all references in this Agreement to “supplements” to the Prospectus shall include, without limitation, any supplements, “wrappers” or similar

materials prepared in connection with any offering, sale or private placement of any Placement Shares by the Agents outside of the United States.

[Signature Page Follows]

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

Very truly yours,

ZYNERBA PHARMACEUTICALS, INC.

By: /s/ Armando Anido

Name: Armando Anido

Title: Chief Executive Officer

ACCEPTED as of the date first-above written:

CANTOR FITZGERALD & CO.

By: /s/ Sage Kelly
Name: Sage Kelly
Title: Global Head of Investment Banking

CANACCORD GENUITY LLC

By: /s/ Eugene Rozelman
Name: Eugene Rozelman
Title: Managing Director

H.C. WAINWRIGHT & CO., LLC

By: /s/ Edward D. Silvera
Name: Edward D. Silvera
Title: Chief Operating Officer

LADENBURG THALMANN & CO. INC.

By: /s/ David J. Strupp, Jr.
Name: David J. Strupp, Jr.
Title: Managing Director

SCHEDULE 1

FORM OF PLACEMENT NOTICE

[Date]

[Designated Agent]

[Address] (the “**Designated Agent**”)

Attn: []

Reference is made to the Sales Agreement among Zynerba Pharmaceuticals, Inc. (the “**Company**”), Cantor Fitzgerald & Co., Canaccord Genuity LLC, H.C. Wainwright & Co., LLC and Ladenburg Thalmann & Co. Inc. dated as of August 30, 2019. The Company confirms that all conditions to the delivery of this Placement Notice are satisfied as of the date hereof.

Date of Delivery of Issuance Notice (determined pursuant to Section 3(b)(i)):

Issuance Amount (equal to the total Sales Price for such Placement Shares):

\$

Number of Days in Selling Period:

First Date of Selling Period:

Last Date of Selling Period:

Settlement Date(s) if other than standard T+2 settlement:

Minimum Price Limitation (in no event less than \$1.00 without the prior written consent of the Designated Agent, which consent may be withheld in the Designated Agent’s sole discretion): \$ per share

Comments:

Zynerba Pharmaceuticals, Inc.

By:

Name:

Title:

SCHEDULE 2

Compensation

The Company shall pay to the Designated Agent in cash, upon each sale of Placement Shares pursuant to this Agreement, an amount up to 3.0% of the aggregate gross proceeds from each sale of Placement Shares.

SCHEDULE 3

Notice Parties

The Company

- Armando Anido (aa@zynerba.com)
- Terri B. Sebree (SeebreeT@zynerba.com)
- Jim Fickenscher (FickenscherJ@zynerba.com)
- Suzanne Hanlon (HanlonS@zynerba.com)

The Agents

- Sameer Vasudev (svasudev@cantor.com)
 - CFControlledEquityOffering@cantor.com
 - ZYNEATM@cgf.com
 - ATM@hcwco.com
 - David Strupp (dstrupp@ladenburg.com)
 - Joseph Giovanniello (jgiovanniello@ladenburg.com)
 - Ken Brush (kbrush@ladenburg.com)
 - Eric Novotny (ENovotny@ladenburg.com)
-

SCHEDULE 4

Subsidiaries

Incorporated by reference to Exhibit 21.1 of the Company's most recently filed Form 10-K.

Form of Representation Date Certificate Pursuant to Section 7(l)

The undersigned, the duly qualified and elected [●], of Zynerba Pharmaceuticals, Inc., a Delaware corporation (the “Company”), does hereby certify in such capacity and on behalf of the Company, pursuant to Section 7(l) of the Sales Agreement, dated August 30, 2019 (the “Sales Agreement”), among the Company, Cantor Fitzgerald & Co., Canaccord Genuity LLC, H.C. Wainwright & Co., LLC and Ladenburg Thalmann & Co. Inc., that to the knowledge of the undersigned:

(i) The representations and warranties of the Company in Section 6 of the Sales Agreement are true and correct on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof, except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date; *provided, however*, that such representations and warranties also shall be qualified by the disclosure included or incorporated by reference in the Registration Statement and Prospectus; and

(ii) The Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied pursuant to the Sales Agreement at or prior to the date hereof.

Capitalized terms used herein without definition shall have the meanings given to such terms in the Sales Agreement.

ZYNERBA PHARMACEUTICALS, INC.

By: _____
Name:
Title:

Date: [●]

Exhibit 21

Permitted Free Writing Prospectus

None.



August 30, 2019

Armando Anido
2219 Grubbs Mill Road
Berwyn, PA 19312-1935

Dear Armando:

As you know, you and Zynerba Pharmaceuticals, Inc. (the "Company") are parties to that certain employment agreement dated as of September 4, 2014 (as amended and/or restated from time to time, the "Employment Agreement"). For good and valuable consideration, you and the Company hereby agree to amend the Employment Agreement as follows:

1. The first paragraph in Section 4(e) of the Employment Agreement is hereby amended and restated in its entirety to read as follows:

"Effect of a Change of Control. Notwithstanding any provision of Section 4(d) to the contrary, if Employee's employment is terminated or Employee resigns for Good Reason (as defined below) pursuant to Section 4(d) within the ninety (90) day period preceding a Change of Control or on or within twelve (12) months following a Change of Control, upon such termination or resignation, Employee shall be entitled to the same payments and benefits described in Section 4(d) above, subject to execution and nonrevocation of the Release and the Employee's compliance with all terms and provisions of this Agreement that survive the termination of the Employee's employment by the Employer, provided that in addition to the severance and other benefits set forth in Section 4(d) (iii) (A)-(C), (i) Employee shall be entitled to receive an additional six (6) months of Base Salary continuation (at the rate in effect on the Termination Date) commencing upon the conclusion of the continued Base Salary under Section 4(d)(iii)(A) and an additional six (6) months of medical and dental coverage (at the same coverage in effect on the Termination Date) commencing upon the conclusion of the continued Base Salary under Section 4(d) (iii)(B); (ii) one hundred percent (100%) of all outstanding unvested stock options and other equity-based awards held by the Employee as of the Termination Date shall become fully vested and exercisable (to the extent applicable) as of the Termination Date; (iii) all outstanding stock options and other equity-based awards held by the Employee as of the Termination Date that become vested pursuant to (ii) above or that are vested as of the Termination Date shall remain exercisable (to the extent applicable) until the earlier of (x) the three (3) year anniversary of the Termination Date and (y) the expiration date of the relevant stock option or other equity-based award; and (iv) provided the Change of Control results in net proceeds per share of capital stock to investors in excess of two times the Series 1 price per share, then Employee shall receive 100% of Employee's targeted annual bonus for the year in which the Termination Date occurs, without regard to whether the relevant Employee and Employer goals have been achieved.

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2. Section 4(g)(vi) of the Employment Agreement is hereby amended and restated in its entirety to read as follows:

- (i) “Good Reason” shall be deemed to exist with respect to any termination of employment by the Employee for any of the following reasons:
- (1) a material reduction in the Employee’s duties and responsibilities, which for purposes of this Agreement means the assignment to Employee of any duties or responsibilities which are materially inconsistent with or adverse to the Employee’s then current duties, responsibilities, positions and/or titles with the Employer;
 - (2) a material reduction of the Employee’s then-current base salary or target bonus opportunity;
 - (3) the requirement that the Employee regularly report to work at a location that is more than fifty (50) miles from the location of the Employee’s employment as of the Effective Date;
 - (4) a material breach of this Agreement by the Employer; or
 - (5) in the event of the assignment of this Agreement to a third party, the failure of the assignee or successor entity to agree to be bound to the terms of this Agreement.

provided, however, that for any of the foregoing to constitute Good Reason, the Employee must provide written notification of Employee’s intention to resign within ninety (90) days after the Employee first knows or first has reason to know of the occurrence of any such event or condition, and, the Employer must have thirty (30) business days from the date of receipt of such notice to effect a cure of the event or condition constituting Good Reason. If the Employer fails to effect a cure of the event or condition constituting Good Reason, the Employee must actually resign from employment within thirty (30) days following the expiration of the foregoing cure period. In the event of a cure of such event or condition constituting Good Reason by the Employer, such event or condition shall no longer constitute Good Reason.”

3. Section 5(a) of the Employment Agreement is hereby amended and restated in its entirety to read as follows:

“**Non-Disclosure.** The Employee acknowledges that in the course of performing services for the Employer, the Employee will obtain knowledge of the Employer’s business plans, products, processes, software, know-how, trade secrets, formulas, methods, models, prototypes, discoveries, inventions, improvements, disclosures, names and positions of employees and/or other proprietary and/or

confidential information (collectively the “Confidential Information”). The Employee agrees to keep the Confidential Information secret and confidential and not to publish, disclose or divulge to any other party, and the Employee agrees not to use any of the Confidential Information for the Employee’s own benefit or to the detriment of the Employer without the prior written consent of the Employer, whether or not such Confidential Information was discovered or developed by the Employee. The Employee also agrees not to divulge, publish or use any proprietary and/or confidential information of others that the Employer is obligated to maintain in confidence.

Nothing in this Agreement shall prohibit the Employee from (a) reporting possible violations of federal law or regulation to any governmental agency or entity or self-regulatory organization or making disclosures that are protected under the whistleblower provisions of federal law or regulation, (b) supplying truthful information to any governmental authority or in response to any lawful subpoena or other legal process, or (c) receiving an award for information provided to any governmental agency. In addition, notwithstanding anything in this Agreement, in accordance with the Defend Trade Secrets Act of 2016, (a) the Employee shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal, and (b) if Employee files a lawsuit for retaliation by the Employer for reporting a suspected violation of law, the Employee may disclose a trade secret to the Employee’s attorney and use the trade secret information in the court proceeding, if the Employee files any document containing the trade secret under seal and does not disclose the trade secret except pursuant to court order.”

4. Except as otherwise amended hereby, all other terms and conditions of the Employment Agreement shall remain in full force and effect.

The provisions of Sections 11 through and including 17 of the Employment Agreement are incorporated herein by reference and shall apply to this amendment (this “Amendment”) as if included herein, provided that all references in such sections to “this Agreement,” “herein,” “hereof,” “hereunder” and similar phrases shall be deemed to refer to this Amendment (and not the Employment Agreement) for purposes of this Amendment.

[signature page follows]

IN WITNESS WHEREOF, this Amendment has been executed by the parties as of the date first above written.

ZYNERBA PHARMACEUTICALS, INC.

By: /s/ Terri B. Sebree

Title: President

/s/ Armando Anido

Armando Anido



August 30, 2019

James E. Fickenschler
585 Oakmont Drive
East, Teleford, PA 18969

Dear Jim:

As you know, you and Zynerba Pharmaceuticals, Inc. (the "Company") are parties to that certain employment agreement dated as of August 11, 2016 (as amended and/or restated from time to time, the "Employment Agreement"). For good and valuable consideration, you and the Company hereby agree to amend the Employment Agreement as follows:

1. The first paragraph in Section 4(e) of the Employment Agreement is hereby amended and restated in its entirety to read as follows:

"Effect of a Change of Control. Notwithstanding any provision of Section 4(d) to the contrary, if Employee's employment is terminated or Employee resigns for Good Reason (as defined below) pursuant to Section 4(d) within the ninety (90) day period preceding a Change of Control or on or within twelve (12) months following a Change of Control, upon such termination or resignation, Employee shall be entitled to the same payments and benefits described in Section 4(d) above, subject to execution and nonrevocation of the Release and the Employee's compliance with all terms and provisions of this Agreement that survive the termination of the Employee's employment by the Employer, provided that in addition to the severance and other benefits set forth in Section 4(d) (iii) (A)-(C), (i) Employee shall be entitled to receive an additional six (6) months of Base Salary continuation (at the rate in effect on the Termination Date) commencing upon the conclusion of the continued Base Salary under Section 4(d)(iii)(A) and an additional six (6) months of medical and dental coverage (at the same coverage in effect on the Termination Date) commencing upon the conclusion of the continued Base Salary under Section 4(d) (iii)(B); (ii) one hundred percent (100%) of all outstanding unvested stock options and other equity-based awards held by the Employee as of the Termination Date shall become fully vested and exercisable (to the extent applicable) as of the Termination Date; (iii) all outstanding stock options and other equity-based awards held by the Employee as of the Termination Date that become vested pursuant to (ii) above or that are vested as of the Termination Date shall remain exercisable (to the extent applicable) until the earlier of (x) the three (3) year anniversary of the Termination Date and (y) the expiration date of the relevant stock option or other equity-based award; and (iv) Employee shall be entitled to one hundred percent (100%) of Employee's targeted bonus for the year in which the Termination Date occurs, without regard to whether the relevant Employee and Employer goals have been achieved.

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2. Section 4(g)(iv) of the Employment Agreement is hereby amended and restated in its entirety to read as follows:

- (i) “Good Reason” shall be deemed to exist with respect to any termination of employment by the Employee for any of the following reasons:
- (1) a material reduction in the Employee’s duties and responsibilities, which for purposes of this Agreement means the assignment to Employee of any duties or responsibilities which are materially inconsistent with or adverse to the Employee’s then current duties, responsibilities, positions and/or titles with the Employer;
 - (2) a material reduction of the Employee’s then-current base salary or target bonus opportunity;
 - (3) the requirement that the Employee regularly report to work at a location that is more than fifty (50) miles from the location of the Employee’s employment as of the Effective Date;
 - (4) a material breach of this Agreement by the Employer; or
 - (5) in the event of the assignment of this Agreement to a third party, the failure of the assignee or successor entity to agree to be bound to the terms of this Agreement.

provided, however, that for any of the foregoing to constitute Good Reason, the Employee must provide written notification of Employee’s intention to resign within ninety (90) days after the Employee first knows or first has reason to know of the occurrence of any such event or condition, and, the Employer must have thirty (30) business days from the date of receipt of such notice to effect a cure of the event or condition constituting Good Reason. If the Employer fails to effect a cure of the event or condition constituting Good Reason, the Employee must actually resign from employment within thirty (30) days following the expiration of the foregoing cure period. In the event of a cure of such event or condition constituting Good Reason by the Employer, such event or condition shall no longer constitute Good Reason.”

3. Section 5(a) of the Employment Agreement is hereby amended and restated in its entirety to read as follows:

“**Non-Disclosure.** The Employee acknowledges that in the course of performing services for the Employer, the Employee will obtain knowledge of the Employer’s business plans, products, processes, software, know-how, trade secrets, formulas, methods, models, prototypes, discoveries, inventions, improvements, disclosures, names and positions of employees and/or other proprietary and/or confidential information (collectively the “Confidential Information”). The Employee agrees to keep

the Confidential Information secret and confidential and not to publish, disclose or divulge to any other party, and the Employee agrees not to use any of the Confidential Information for the Employee's own benefit or to the detriment of the Employer without the prior written consent of the Employer, whether or not such Confidential Information was discovered or developed by the Employee. The Employee also agrees not to divulge, publish or use any proprietary and/or confidential information of others that the Employer is obligated to maintain in confidence.

Nothing in this Agreement shall prohibit the Employee from (a) reporting possible violations of federal law or regulation to any governmental agency or entity or self-regulatory organization or making disclosures that are protected under the whistleblower provisions of federal law or regulation, (b) supplying truthful information to any governmental authority or in response to any lawful subpoena or other legal process, or (c) receiving an award for information provided to any governmental agency. In addition, notwithstanding anything in this Agreement, in accordance with the Defend Trade Secrets Act of 2016, (a) the Employee shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal, and (b) if Employee files a lawsuit for retaliation by the Employer for reporting a suspected violation of law, the Employee may disclose a trade secret to the Employee's attorney and use the trade secret information in the court proceeding, if the Employee files any document containing the trade secret under seal and does not disclose the trade secret except pursuant to court order."

4. Except as otherwise amended hereby, all other terms and conditions of the Employment Agreement shall remain in full force and effect.

The provisions of Sections 11 through and including 17 of the Employment Agreement are incorporated herein by reference and shall apply to this amendment (this "Amendment") as if included herein, provided that all references in such sections to "this Agreement," "herein," "hereof," "hereunder" and similar phrases shall be deemed to refer to this Amendment (and not the Employment Agreement) for purposes of this Amendment.

[signature page follows]

IN WITNESS WHEREOF, this Amendment has been executed by the parties as of the date first above written.

ZYNERBA PHARMACEUTICALS, INC.

By: /s/ Armando Anido
Title: Chief Executive Officer

/s/ James E. Fickenscher
James E. Fickenscher



August 30, 2019

Terri B. Sebree
922 Merion Square Road
Gladwyne, PA 19035

Dear Terri:

As you know, you and Zynerba Pharmaceuticals, Inc. (the "Company") are parties to that certain employment agreement dated as of October 2, 2014 (as amended and/or restated from time to time, the "Employment Agreement"). For good and valuable consideration, you and the Company hereby agree to amend the Employment Agreement as follows:

1. The first paragraph in Section 4(e) of the Employment Agreement is hereby amended and restated in its entirety to read as follows:

"Effect of a Change of Control. Notwithstanding any provision of Section 4(d) to the contrary, if Employee's employment is terminated or Employee resigns for Good Reason (as defined below) pursuant to Section 4(d) within the ninety (90) day period preceding a Change of Control or on or within twelve (12) months following a Change of Control, upon such termination or resignation, Employee shall be entitled to the same payments and benefits described in Section 4(d) above, subject to execution and nonrevocation of the Release and the Employee's compliance with all terms and provisions of this Agreement that survive the termination of the Employee's employment by the Employer, provided that in addition to the severance and other benefits set forth in Section 4(d) (iii) (A)-(C), (i) Employee shall be entitled to receive an additional six (6) months of Base Salary continuation (at the rate in effect on the Termination Date) commencing upon the conclusion of the continued Base Salary under Section 4(d)(iii)(A) and an additional six (6) months of medical and dental coverage (at the same coverage in effect on the Termination Date) commencing upon the conclusion of the continued Base Salary under Section 4(d) (iii)(B); (ii) one hundred percent (100%) of all outstanding unvested stock options and other equity-based awards held by the Employee as of the Termination Date shall become fully vested and exercisable (to the extent applicable) as of the Termination Date; (iii) all outstanding stock options and other equity-based awards held by the Employee as of the Termination Date that become vested pursuant to (ii) above or that are vested as of the Termination Date shall remain exercisable (to the extent applicable) until the earlier of (x) the three (3) year anniversary of the Termination Date and (y) the expiration date of the relevant stock option or other equity-based award; and (iv) provided the Change of Control results in net proceeds per share of capital stock to investors in excess of two times the Series 1 price per share, then Employee shall receive 100% of Employee's targeted annual bonus for the year in which the Termination Date occurs, without regard to whether the relevant Employee and Employer goals have been achieved.

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2. Section 4(g)(vi) of the Employment Agreement is hereby amended and restated in its entirety to read as follows:

- (i) “Good Reason” shall be deemed to exist with respect to any termination of employment by the Employee for any of the following reasons:
- (1) a material reduction in the Employee’s duties and responsibilities, which for purposes of this Agreement means the assignment to Employee of any duties or responsibilities which are materially inconsistent with or adverse to the Employee’s then current duties, responsibilities, positions and/or titles with the Employer (e.g., a change in the Employee’s title of ‘President’ or a change in the Employee’s direct reporting to the Chief Executive Officer (CEO);
 - (2) a material reduction of the Employee’s then-current base salary or target bonus opportunity;
 - (3) the requirement that the Employee regularly report to work at a location that is more than fifty (50) miles from the location of the Employee’s employment as of the Effective Date;
 - (4) a material breach of this Agreement by the Employer; or
 - (5) in the event of the assignment of this Agreement to a third party, the failure of the assignee or successor entity to agree to be bound to the terms of this Agreement.

provided, however, that for any of the foregoing to constitute Good Reason, the Employee must provide written notification of Employee’s intention to resign within ninety (90) days after the Employee first knows or first has reason to know of the occurrence of any such event or condition, and, the Employer must have thirty (30) business days from the date of receipt of such notice to effect a cure of the event or condition constituting Good Reason. If the Employer fails to effect a cure of the event or condition constituting Good Reason, the Employee must actually resign from employment within thirty (30) days following the expiration of the foregoing cure period. In the event of a cure of such event or condition constituting Good Reason by the Employer, such event or condition shall no longer constitute Good Reason.”

3. Section 5(a) of the Employment Agreement is hereby amended and restated in its entirety to read as follows:

“**Non-Disclosure.** The Employee acknowledges that in the course of performing services for the Employer, the Employee will obtain knowledge of the Employer’s business plans, products, processes,

software, know-how, trade secrets, formulas, methods, models, prototypes, discoveries, inventions, improvements, disclosures, names and positions of employees and/or other proprietary and/or confidential information (collectively the "Confidential Information"). The Employee agrees to keep the Confidential Information secret and confidential and not to publish, disclose or divulge to any other party, and the Employee agrees not to use any of the Confidential Information for the Employee's own benefit or to the detriment of the Employer without the prior written consent of the Employer, whether or not such Confidential Information was discovered or developed by the Employee. The Employee also agrees not to divulge, publish or use any proprietary and/or confidential information of others that the Employer is obligated to maintain in confidence.

Nothing in this Agreement shall prohibit the Employee from (a) reporting possible violations of federal law or regulation to any governmental agency or entity or self-regulatory organization or making disclosures that are protected under the whistleblower provisions of federal law or regulation, (b) supplying truthful information to any governmental authority or in response to any lawful subpoena or other legal process, or (c) receiving an award for information provided to any governmental agency. In addition, notwithstanding anything in this Agreement, in accordance with the Defend Trade Secrets Act of 2016, (a) the Employee shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal, and (b) if Employee files a lawsuit for retaliation by the Employer for reporting a suspected violation of law, the Employee may disclose a trade secret to the Employee's attorney and use the trade secret information in the court proceeding, if the Employee files any document containing the trade secret under seal and does not disclose the trade secret except pursuant to court order."

4. Except as otherwise amended hereby, all other terms and conditions of the Employment Agreement shall remain in full force and effect.

The provisions of Sections 11 through and including 17 of the Employment Agreement are incorporated herein by reference and shall apply to this amendment (this "Amendment") as if included herein, provided that all references in such sections to "this Agreement," "herein," "hereof," "hereunder" and similar phrases shall be deemed to refer to this Amendment (and not the Employment Agreement) for purposes of this Amendment.

[signature page follows]

IN WITNESS WHEREOF, this Amendment has been executed by the parties as of the date first above written.

ZYNERBA PHARMACEUTICALS, INC.

By: /s/ Armando Anido
Title: Chief Executive Officer

/s/ Terri B. Sebree
Terri B. Sebree